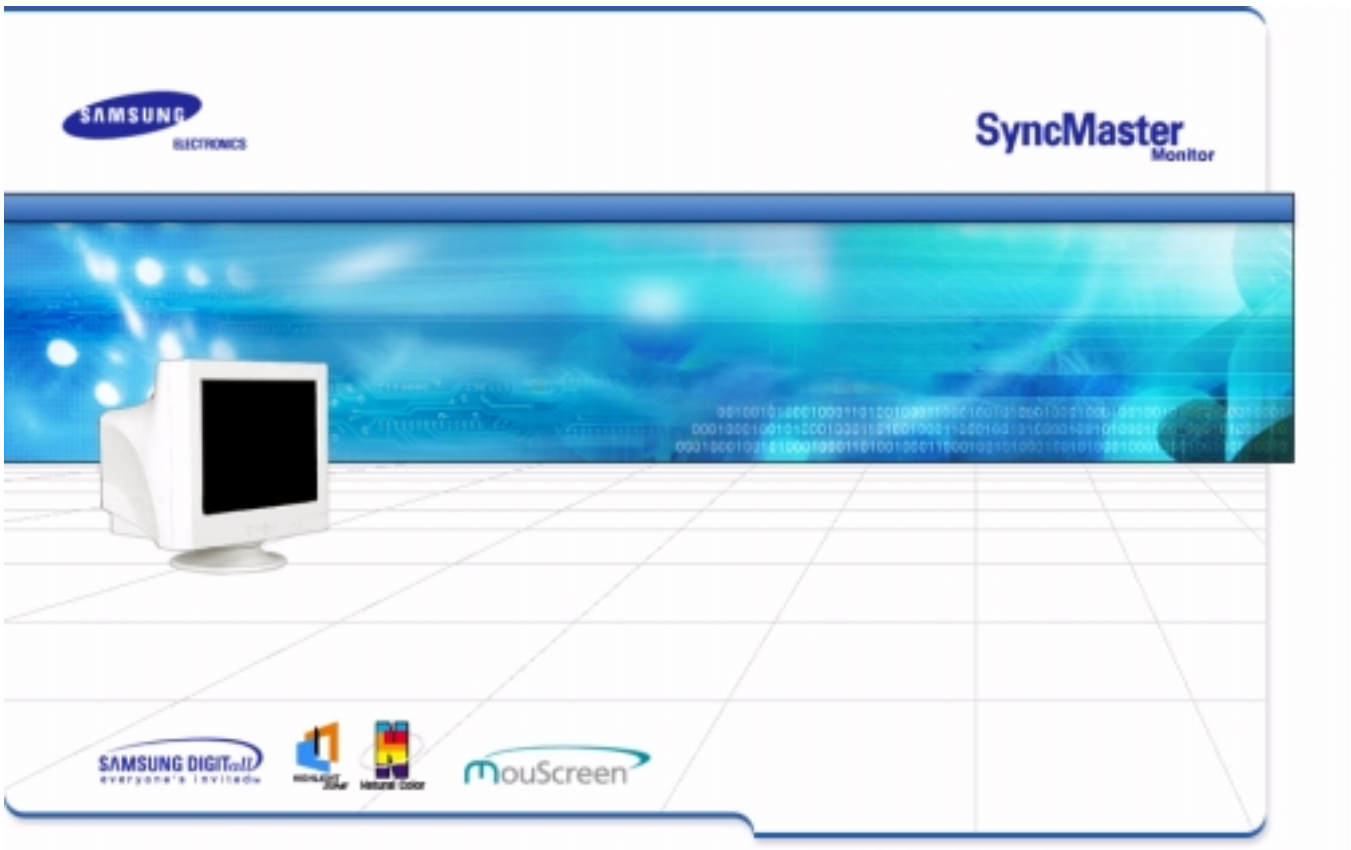

SyncMaster 959NF/900NF

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Safety Instructions

Notational

Please read the following safety instructions as they are designed to prevent damage to property and harm to the user.

Warning/Caution

Failure to follow directions noted by this symbol could result in bodily harm or damage to equipment.

Notation Conventions

Prohibited

Important to read and understand at all times

Do not disassemble

Disconnect the plug from the outlet

Do not touch

Grounding to prevent an electric shock

Safety Instructions

Power

When not used for extended periods of time, set your PC to DPMS. If using a screen saver, set it to the active screen mode.

If the size of your monitor is small, or if the same image is present for long periods of time, you may see afterimages due to damage to the flourescent substance on the inside of the CDT.

- **Do not use a damaged or loose plug.**
  - This may cause an electric shock or fire.

- **Do not pull the plug out by the wire nor touch the plug with wet hands.**
  - This may cause an electric shock or fire.

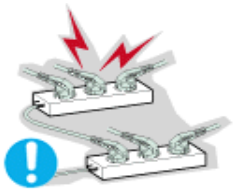
- **Use only a properly grounded plug and recepticle.**
  - An improper ground may cause electric shock or equipment damage

- **Do not excessively bend the plug and wire nor place heavy objects upon them, which could cause damage.**
  - Failure to do so may cause an electric shock or fire.

Safety Instructions

Power

- **Disconnect the plug from the outlet during storms or lightening or if it is not used for a long period of time.**
  - Failure to do so may cause an electric shock or fire.



- **Do not connect too many extension cords or plugs to an outlet.**
  - This may cause a fire.

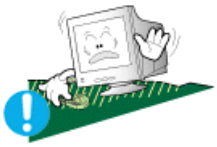
Safety Instructions

Installation

- **Do not cover the vents on the monitor cabinet.**
  - Bad ventilation may cause a breakdown or fire.

- **Put your monitor in a location with low humidity and a minimum of dust.**
  - An electric shock or fire could result inside the monitor.

- **Do not drop the monitor when moving it.**
  - This may cause damage to the product or human body.



- **Place the monitor on a flat and stable surface.**
  - The monitor can cause injury by falling.

- **Set down the monitor carefully.**
  - It could be damaged or broken.

Safety Instructions

Installation

- **Do not place the monitor face down.**
  - The CDT surface may be damaged.

- **Do not use the monitor without the monitor stand.**
  - It could break down or cause a fire due to bad ventilation.
  - If the monitor must be used without the supplied stand, take steps to insure proper ventilation.

Safety Instructions

Clean

When cleaning the monitor case or the surface of the CDT, wipe with a slightly moistened, soft fabric.
Do not clean Flat monitor with water. Use a water-diluted mild detergent.

(Some detergents contain significant amounts of alcohol-based solvents, which can damage (color change) or crack the monitor case. The antiglare/anti-static surface coating on the CDT may also be affected.)

Dilute the detergent (1:10 ratio) with water before using.

- **Do not spray detergent directly on the monitor.**

- **Use the recommended detergent with a smooth cloth.**
  - You can prevent the coated CDT from being damaged or the monitor cabinet from being dissolved, cracked or discolored.
  - You can buy a recommended detergent at any Samsung Service Center.

Caution: Use a recommended detergent only, as other surfactants containing large amounts of alcohol, solvent or other strong substances, can discolor or crack the monitor or damage the coated CDT.

- **If the connector between the plug and the pin is dusty or dirty, clean it properly with a dry cloth.**
  - A dirty connector can cause an electric shock or fire.

- **Do not set a glass of water, chemicals or any small metal objects on the monitor.**
  - This may cause damage, electric shock or a fire.
  - If a foreign substance gets into the monitor, disconnect the plug and then contact a service center.

Safety Instructions

Other

- **Do not remove cover(or back). No user serviceable parts inside.**
  - This may cause an electric shock or a fire.
  - Refer servicing to qualified service personnel.

- **If your monitor does not operate normally - in particular, if there are any unusual sounds or smells coming from it - unplug it immediately and contact an authorized dealer or service.**
  - This may cause an electric shock or a fire.

- **Do not place any heavy objects on the monitor.**
  - This may cause an electric shock or a fire.

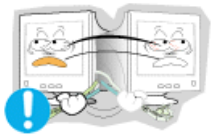
- **For each hour of looking at the monitor, you should let your eyes rest for 5 minutes.**
  - This will reduce eye fatigue.

- **Do not use or store inflammable substances near the monitor.**
  - This may cause an explosion or fire.

Safety Instructions

Other

- **Do not try to move the monitor by pulling on the wire or the signal cable.**
  - This may cause a breakdown, electric shock or a fire due to damage to the cable.



- **Do not move the monitor right or left by pulling only the wire or the signal cable.**
  - This may cause a breakdown, electric shock or a fire due to damage to the cable.

- **Never insert anything metallic into the monitor openings.**
  - This may cause an electric shock, fire or injury.

- **Keep the monitor away from any magnetic substances.**
  - This may cause discoloring or distortion of the image.

Introduction

Unparking

- **Monitor and Stand**

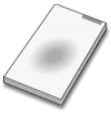
(Some models include a stand attached.)
Please make sure the following items are included with your monitor. If any items are missing, contact your dealer.

- **Power Cord**

- **Stand**

- **Signal Cable (Option)**

- **Quick Setup Guide**



- **Warranty Card**
  (Not available in all locations)

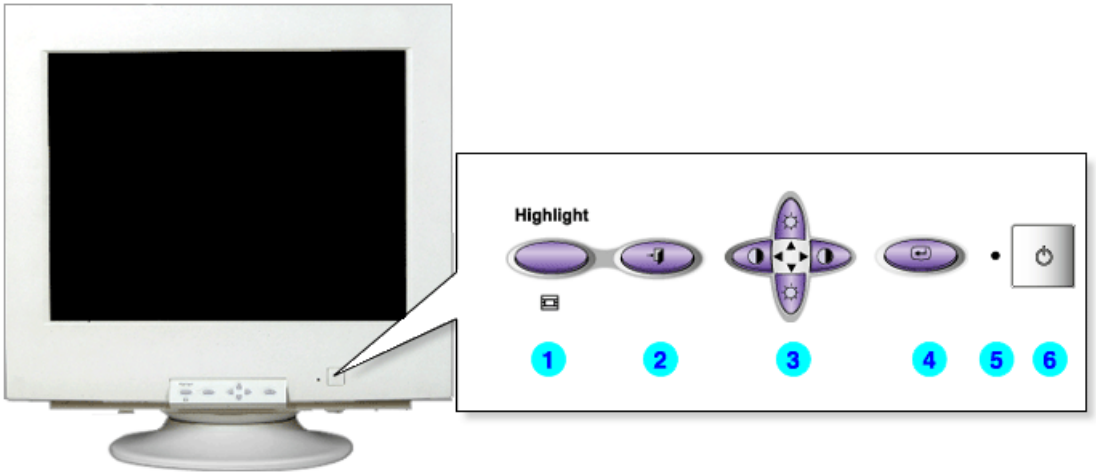
- **User's Guide and Driver Installation CD**

- **USB Cable**

- **USB Hub(Option)**

Introduction

Front



1. Highlight button The Highlight Zone ensures clear images on TVs, video conferencing systems or photos by emphasizing a certain area on the screen.

2. Exit button Use this button to Exit the active menu or the OSD.

3. Adjust buttons These buttons allow you to highlight and adjust items in the menu.

4. Menu button Use this button to open the OSD and activate a highlighted menu item.

5. Power indicator This light glows green during normal operation, and blinks green once as the monitor saves your adjustments.

6. Power button Use this button to turn the monitor on and off.

Note: See PowerSaver described in the manual for further information regarding power saving functions. For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods.

Introduction

Rear

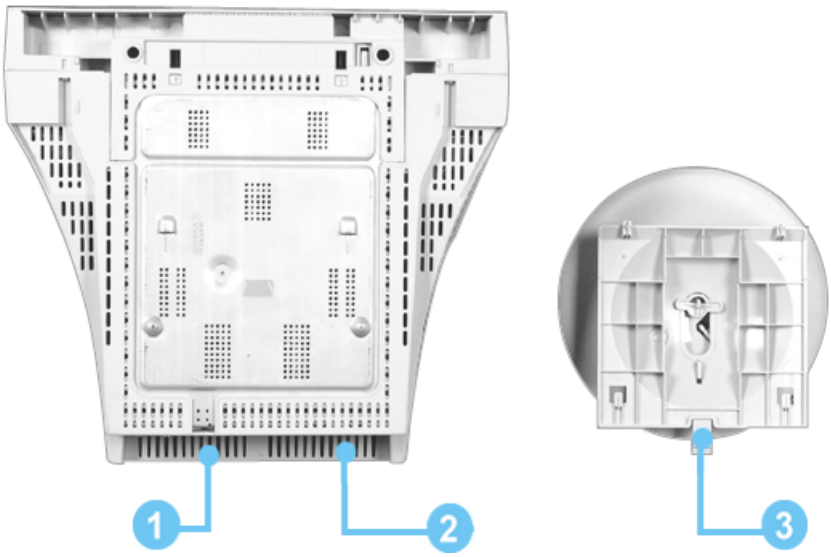
(The configuration at the back of the monitor may vary from product to product.)

1. Power port	Connect the power cord for your monitor to the power port on the back of the monitor.
2. Signal port	Connect the signal cable to the video port on your computer, video board, video card, or graphics card.
3. BNC Connectors(Option)	Connect the signal cable to the BNC signal port on the back of your monitor.
4. USB Connector	Connect the USB cable to the USB port on the back of your monitor.

Note: See Connecting Your Monitor for further information regarding cable connections.

Introduction

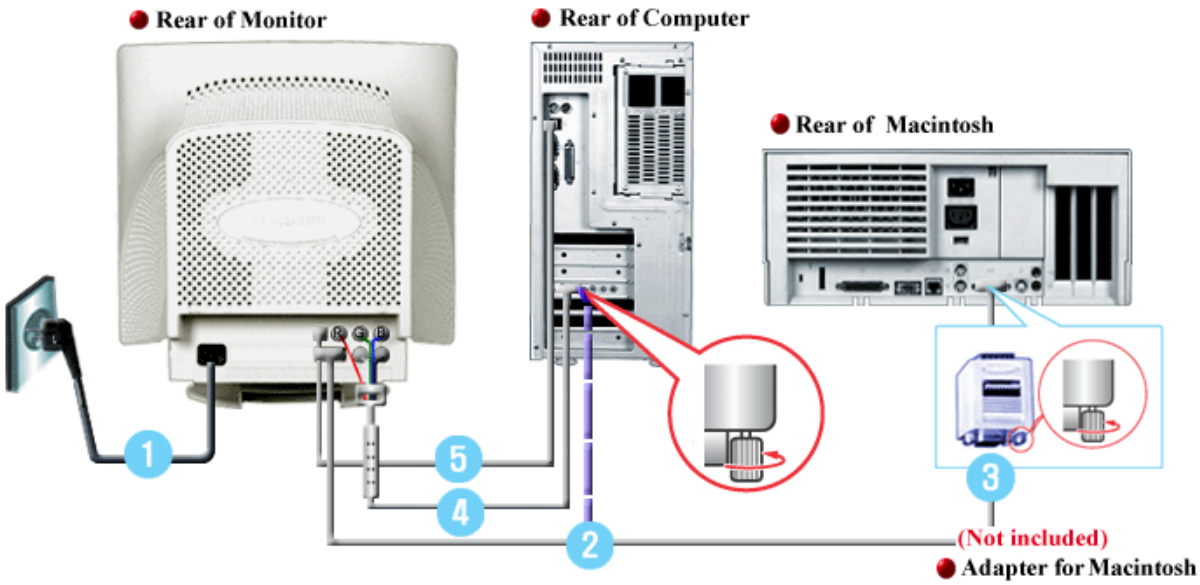
Bottom



1. Signal port	Connect the signal cable to the video port on your computer, video board, video card, or graphics card.
2. Power Port	Connect the power cord for your monitor to the power port on the back of the monitor.
3. Tilt/Swivel Base	You can separate the base from the monitor.

Setup

Connecting Your Monitor



1. Connect the power cord for your monitor to the power port on the back of the monitor.
   Plug the power cord for the monitor into a nearby outlet.
2. Connect the signal cable to the video port on your computer, video board, video card, or graphics card.
3. If you are using a Macintosh computer, connect the cable to a Macintosh adapter, and set the pins on your adapter (Adapter not included). A PC-compatible computer does not need an adapter.
4. Connect the signal cable to the BNC signal port on the back of your monitor/computer.
5. Connect the USB cable to the USB port on the back of your monitor/computer.
6. Turn on your computer and monitor. If your monitor displays an image, installation is complete.

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eryone's invited™

Setup

Automatic

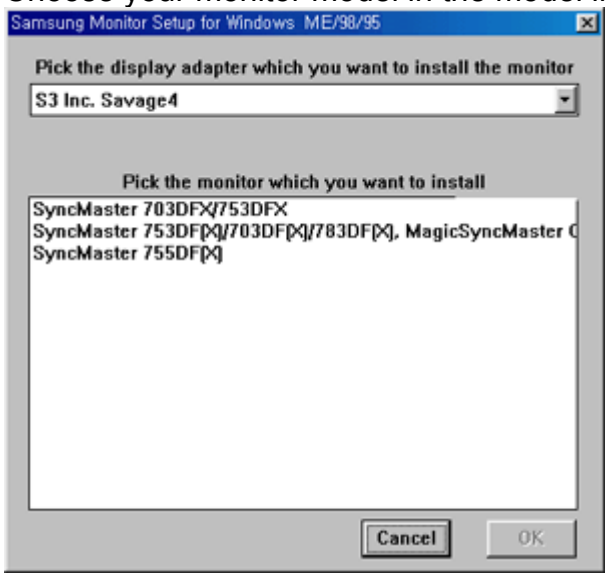
Note **When prompted by the operating system for the monitor driver, insert the CD-ROM included with this monitor. Driver installation is slightly different from one operating system to another. Follow the directions as appropriate for the operating system you have.**

Prepare a blank disk and download the driver program file at the Internet web site shown here.

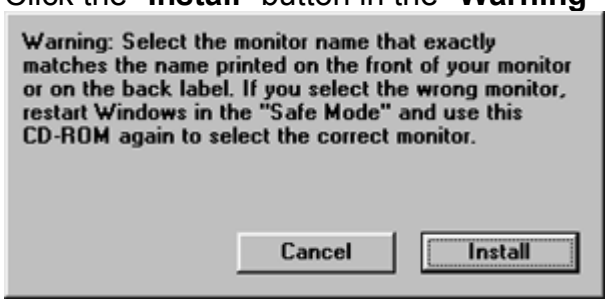
- Internet web site : http://www.samsung-monitor.com/ (Worldwide)
  http://www.samsungusa.com/monitor/ (USA)
  http://www.sec.co.kr/monitor/ (Korea)
  http://www.samsungmonitor.com.cn/ (China)

Windows ME/98/95

1. Insert CD into the CD-ROM driver.
2. Click **"Windows ME/98/95 Driver"**.
3. Choose your monitor model in the model list, then click the **"OK"** button.


Samsung Monitor Setup for Windows ME/98/95
Pick the display adapter which you want to install the monitor
S3 Inc. Savage4
Pick the monitor which you want to install
SyncMaster 703DFX/753DFX
SyncMaster 753DF[X]/703DF[X]/783DF[X], MagicSyncMaster
SyncMaster 755DF[X]
Cancel
OK

4. Click the "**Install**" button in the "**Warning**" window.

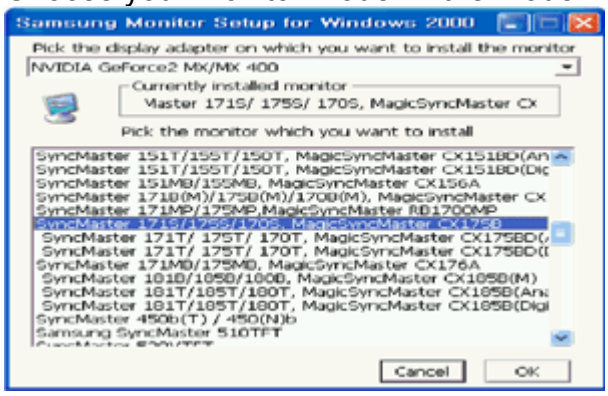

Warning: Select the monitor name that exactly matches the name printed on the front of your monitor or on the back label. If you select the wrong monitor, restart Windows in the "Safe Mode" and use this CD-ROM again to select the correct monitor.
Cancel
Install

5. Monitor driver installation is completed.

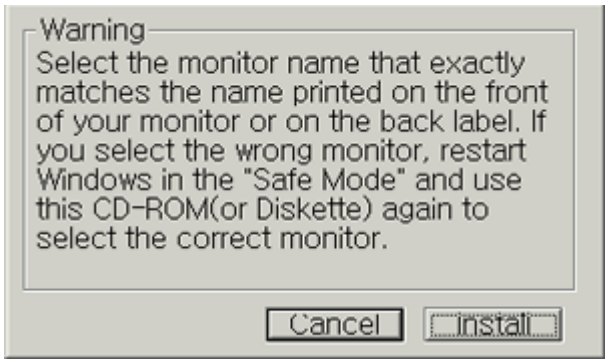
Setup

Windows XP/2000

1. Insert CD into the CD-ROM driver.
2. Click **"Windows XP/2000 Driver"**.
3. Choose your monitor model in the model list, then click the **"OK"** button.


Samsung Monitor Setup for Windows 2000
Pick the display adapter on which you want to install the monitor
NVIDIA GeForce2 MX/MX 400
Currently installed monitor
Master 171S/ 175S/ 170S, MagicSyncMaster CX
Pick the monitor which you want to install
SyncMaster 151T/155T/150T, MagicSyncMaster CX151BD(An
SyncMaster 151T/155T/150T, MagicSyncMaster CX151BD(Dic
SyncMaster 151MB/155MB, MagicSyncMaster CX156A
SyncMaster 171B(M)/175B(M)/170B(M), MagicSyncMaster CX
SyncMaster 171MP/175MP,MagicSyncMaster RB1700MP
SyncMaster 171T/ 175T/ 170T, MagicSyncMaster CX175BD(
SyncMaster 171T/ 175T/ 170T, MagicSyncMaster CX175BD(
SyncMaster 171MB/175MB, MagicSyncMaster CX176A
SyncMaster 101B/105B/100B, MagicSyncMaster CX105B(M)
SyncMaster 101T/105T/100T, MagicSyncMaster CX105B(An
SyncMaster 101T/105T/100T, MagicSyncMaster CX105B(Dig
SyncMaster 450b(T) / 450(N)b
Samsung SyncMaster 510TFT
Cancel
OK

4. Click the "**Install**" button in the "**Warning**" window.


Warning
Select the monitor name that exactly matches the name printed on the front of your monitor or on the back label. If you select the wrong monitor, restart Windows in the "Safe Mode" and use this CD-ROM(or Diskette) again to select the correct monitor.
Cancel
Install

5. If you can see following **"Message"** window, then click the **"Continue Anyway"** button. Then click **"OK"** button.

Hardware Installation
The software you are installing for this hardware:
SyncMaster 171S/ 175S/ 170S, MagicSyncMaster CX175S
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

This monitor driver is under certifying MS logo,and this installation don't damage your system.The certified driver will be posted on Samsung Monitor Homepage http://www.samsung-monitor.com/.

6. Monitor driver installation is completed.

Setup

Note **When prompted by the operating system for the monitor driver, insert the CD-ROM included with this monitor. Driver installation is slightly different from one operating system to another. Follow the directions as appropriate for the operating system you have.**

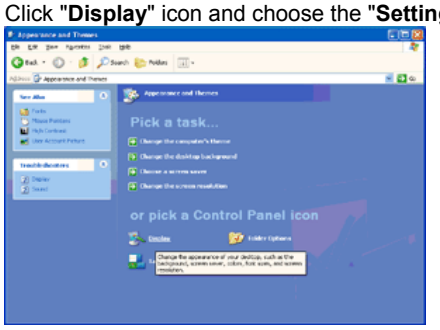
Prepare a blank disk and download the driver program file at the Internet web site shown here.

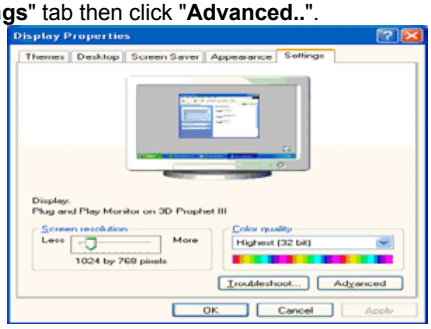
- Internet web site : http://www.samsung-monitor.com/ (Europe)
  http://www.samsungusa.com/monitor/ (USA)
  http://www.sec.co.kr/monitor/ (Korea)
  http://www.samsungmonitor.com.cn/ (China)

Microsoft® Windows® XP Operating System

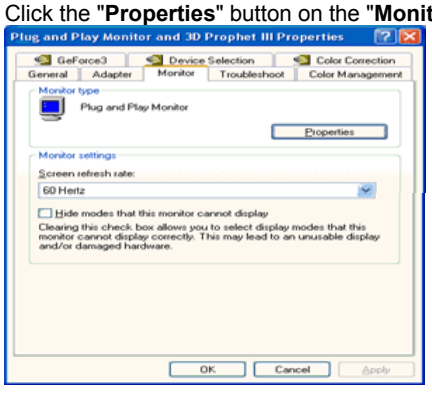
1. Insert CD into the CD-ROM driver.
2. Click "**Start**" —> "**Control Panel**" then click the "**Appearance and Themes**" Icon.

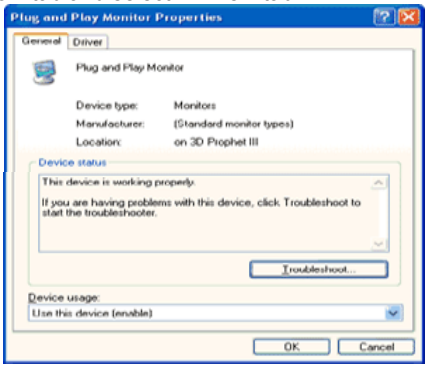
3. Click "**Display**" icon and choose the "**Settings**" tab then click "**Advanced..**".





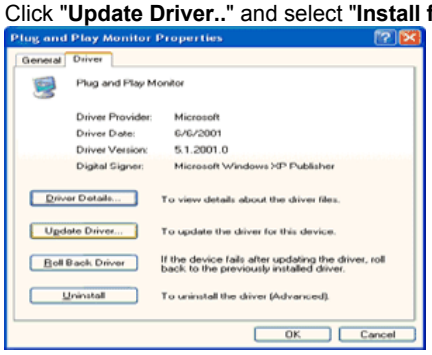
4. Click the "**Properties**" button on the "**Monitor**" tab and select "**Driver**" tab.

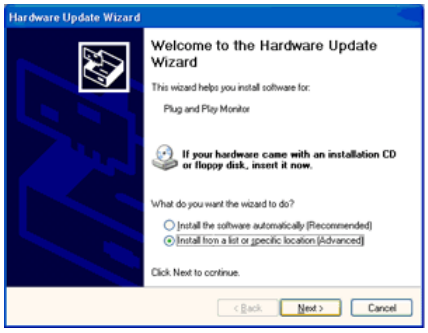




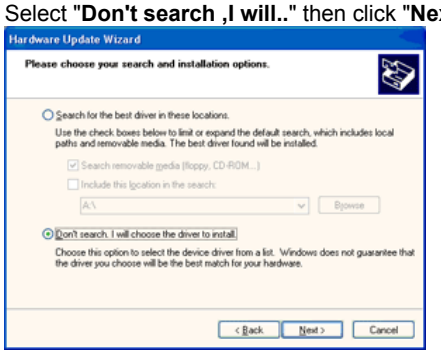
Setup

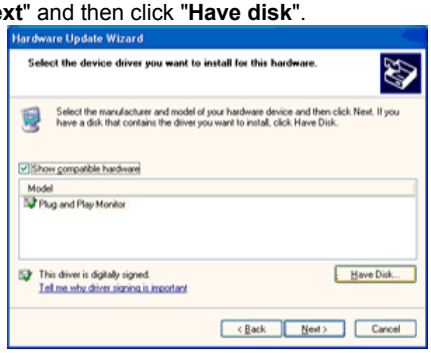
5. Click "**Update Driver..**" and select "**Install from a list or..**" then click "**Next**" button.



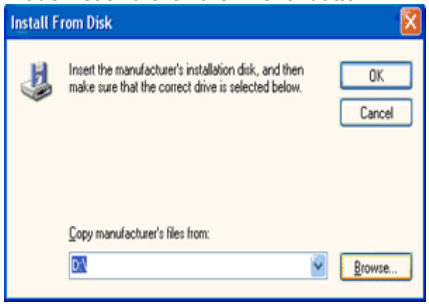

Hardware Update Wizard
Welcome to the Hardware Update Wizard
This wizard helps you install software for:
Plug and Play Monitor
If your hardware came with an installation CD or floppy disk, insert it now.
What do you want the wizard to do?
Install the software automatically (Recommended)
Install from a list or specific location (Advanced)
Click Next to continue.
< Back
Next >
Cancel

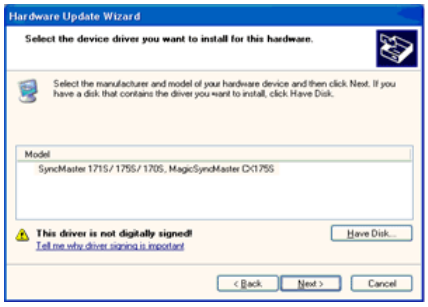
6. Select "**Don't search ,I will..**" then click "**Next**" and then click "**Have disk**".


Hardware Update Wizard
Please choose your search and installation options.
Search for the best driver in these locations.
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.
Search removable media (floppy, CD-ROM...)
Include this location in the search:
A:\
Browse
Don't search. I will choose the driver to install.
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.
< Back
Next >
Cancel

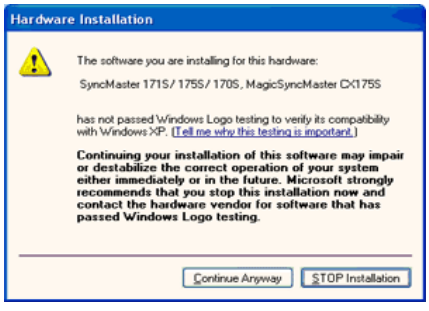

Hardware Update Wizard
Select the device driver you want to install for this hardware.
Select the manufacturer and model of your hardware device and then click Next. If you have a disk that contains the driver you want to install, click Have Disk.
Show compatible hardware
Model
Plug and Play Monitor
This driver is digitally signed.
Tell me why driver signing is important
Have Disk...
< Back
Next >
Cancel

7. Click the "**Browse**" button then choose A:(D:\Driver) and choose your monitor model in the model list and click the "**Next**" button.




Hardware Update Wizard
Select the device driver you want to install for this hardware.
Select the manufacturer and model of your hardware device and then click Next. If you have a disk that contains the driver you want to install, click Have Disk.
Model
SyncMaster 171S / 175S / 170S, MagicSyncMaster CX175S
This driver is not digitally signed!
Tell me why driver signing is important
Have Disk...
< Back
Next >
Cancel

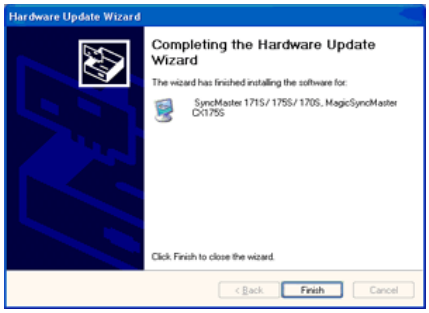
8. If you can see following "**Message**" window, then click the "**Continue Anyway**" button. Then click "**OK**" button.


Hardware Installation
The software you are installing for this hardware:
SyncMaster 171S / 175S / 170S, MagicSyncMaster CX175S
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

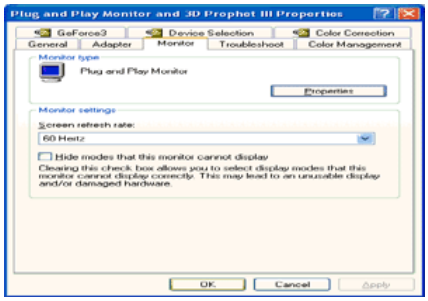
Setup

This monitor driver is under certifying MS logo,and this installation don't damage your system.The certified driver will be posted on Samsung Monitor Homepage http://www.samsung-monitor.com/.

9. Click the "**Close**" button then click "**OK**" button continually.


Hardware Update Wizard
Completing the Hardware Update Wizard
The wizard has finished installing the software for:
SyncMaster 171S/ 175S/ 170S, MagicSyncMaster CX175S
Click Finish to close the wizard.
< Back
Finish
Cancel

SyncMaster 171S/ 175S/ 170S, MagicSyncMaster CX...
General
Driver
SyncMaster 171S/ 175S/ 170S, MagicSyncMaster CX175S
Driver Provider: Samsung
Driver Date: 9/11/2001
Driver Version: 1.0.0.0
Digital Signer: Not digitally signed
Driver Details...
To view details about the driver files.
Update Driver...
To update the driver for this device.
Roll Back Driver
If the device fails after updating the driver, roll back to the previously installed driver.
Uninstall
To uninstall the driver (Advanced).
Close
Cancel



10. Monitor driver installation is completed.

Microsoft® Windows® 2000 Operating System

When you can see "Digital Signature Not Found" on your monitor, follow these steps.

1. Choose "**OK**" button on the "**Insert disk**" window.
2. Click the "**Browse**" button on the "**File Needed**" window.
3. Choose A:(D:\Driver) then click the "Open" button and then click "**OK**" button.

How to install

1. Click "**Start**" , "**Setting**" , "**Control Panel**".
2. Double click the "**Display**" Icon.
3. Choose the "**Settings**" tab and then click "**Advanced..**".
4. Choose "**Monitor**".
   - Case1: If the "Properties" button is inactive, it means your monitor is properly configured. Please stop installation
   - Case2: If the "Properties" button is active, click the "Properties" button then follow next steps continually.
5. Click "**Driver**" and then click on "**Update Driver..**" then click on the "Next" button.
6. Choose "**Display a list of the known drivers for this device so that I can choose a specific driver**" then click "**Next**" and then click "**Have disk**".
7. Click the "**Browse**" button then choose A:(D:\Driver).
8. Click the "**Open**" button, then click "**OK**" button.
9. Choose your monitor model and click the "**Next**" button then click "**Next**" button.
10. Click the "**Finish**" button then the "**Close**" button.

If you can see the "**Digital Signature Not Found**" window then click the "**Yes**"button.
And click the "**Finish**" button then the "**Close**" button.

Setup

Microsoft® Windows® Millennium Operating System

1. Click "**Start**" , "**Setting**" , "**Control Panel**".
2. Double click "**Display**" icon.
3. Select the "**Settings**" tab and click "**Advanced Properties**" button.
4. Select the "**Monitor**" tab.
5. Click the "**Change**" button in the "**Monitor Type**" area.
6. Choose "**Specify the location of the driver**".
7. Choose "**Display a list of all the driver in a specific location..**" then click "**Next**" button.
8. Click the "**Have Disk**" button
9. Specify A:\(D:\driver) then click "**OK**" button.
10. Select "**Show all devices**" and choose the monitor that corresponds to the one you connected to your computer and click "**OK**".
11. Continue choosing "**Close**" button and "**OK**" button until you close the Display Properties dialogue box.
    (You can get some other screen for warning message or others, then click the appreciate option for your monitor.)

Microsoft® Windows® 98 Operating System

1. Click "**Start**" , "**Setting**" , "**Control Panel**".
2. Double click "**Display**" icon.
3. Select the "**Settings**" tab and click "**Advanced Properties**" button.
4. Select the "**Monitor**" tab.
5. Click the "**Change**" button in the "**Monitor Type**" area then click "**Next**" button.
6. Choose "**Display a list of all the driver..**" then click "**Next**" button.
7. Click the "**Have Disk**" button, then click "**browse..**" button.
8. Specify A:\(D:\driver) then click "**OK**" button.
9. The "**Select Device**" dialogue box will appear. Select "**Show all devices**" then choose the monitor that corresponds to the one you connected to your computer and click OK.
10. Continue choosing "**Close**" button and "**O.K**" button until you close the Display Properties dialogue box.

Microsoft® Windows® 95 Operating System

First determine the Windows 95 version installed on your computer by right-clicking the My Computer icon on PC and selecting Properties. The version number is listed under System. Perform the steps for the appropriate version.

Version 4.00.950A

1. Click **Start**, **Settings**, **Control Panel**, and then double-click "**Display**" icon.
2. In the "**Display Properties**" window, click the "**Settings**" tab and click "**Change Display Type**".
3. In the "**Change Display Type**" window, click "**Change**" and then click "**Have Disk**".
4. Click "**browse..**" button and specify A:\(D:\driver) and click "**OK**".
5. In the Select Device window, click the appropriate monitor model and then click OK.
6. Continue choosing "**Close**" button and "**OK**" button until you close the "**Display Properties**" dialogue box.

Version 4.00.950B

1. Click **Start**, **Settings**, **Control Panel**, and then double-click "**Display**" icon.
2. In the "**Display Properties**" window, click the Settings tab and then click "**Advanced Properties**" button.
3. In the "**Advanced Display Properties**" window, click the "**Monitor**" tab and then click "**Change**" button.
4. In the "**Select Device**" window, click "**Have Disk**" button.
5. Click "**browse..**" button and specify A:\(D:\driver) and click "**OK**".
6. In the "**Select Device**" window, click the appropriate monitor model and then click "**OK**".

Setup

7. Continue choosing "**Close**" button and "**OK**" button until you close the "**Display Properties**" dialogue box.

Microsoft® Windows® NT Operating System

1. Click **Start**, **Settings**, **Control Panel**, and then double-click **Display** icon.
2. In Display Registration Information window, click Settings Tab and then click **All Display Modes**.
3. Select a mode that you wish to use (Resolution, Number of colors and Vertical frequency) and then click **OK**.
4. Click **Apply** button if you see the screen working normally after clicking Test. If the screen is not normal, change to a different mode (lower mode of resolution, colors or frequency).

Note: If there is no Mode at **All Display Modes**, select the level of resolution and vertical frequency by referring to the Preset Display Modes in the user guide.

Linux Operating System

To execute X-Window, you need to make the X86Config file, which is a type of system setting file.

1. Press Enter at the first and the second screen after executing the X86Config file.
2. The third screen is for **setting your mouse**.
3. Set a mouse for your computer.
4. The next screen is for **selecting a keyboard**.
5. Set a Keyboard for your computer.
6. The next screen is for **setting your monitor**.
7. First of all, set a **horizontal frequency** for your monitor. (You can enter the frequency directly.)
8. Set a **vertical frequency** for your monitor. (You can enter the frequency directly.)
9. Enter the **model name of your monitor**. This information will not affect the actual execution of X-Window.
10. You have **finished** setting up your monitor.
    Execute X-Window after setting other requested hardware.

Setup

Base Installation

Tilt/Swivel Base

With the built-in pedestal, you can tilt and/or swivel the monitor for the most comfortable viewing angle.

Note: The base is detachable.

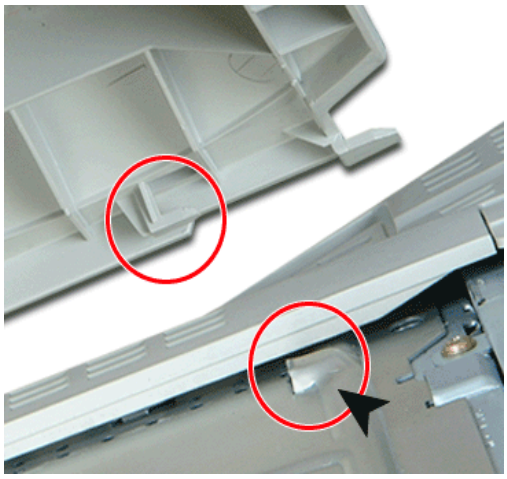
Setup

Base Installation

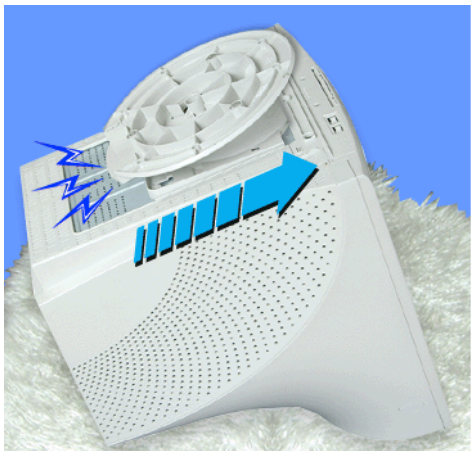
Attaching and Removing the Bose

1 Attaching the Base

1. Place the monitor upside-down on a flat work surface.



2. Align the tabs on the base with the corresponding slots on the bottom of the monitor.



3.Press the base onto the monitor until the tabs are fully engaged in the slots.

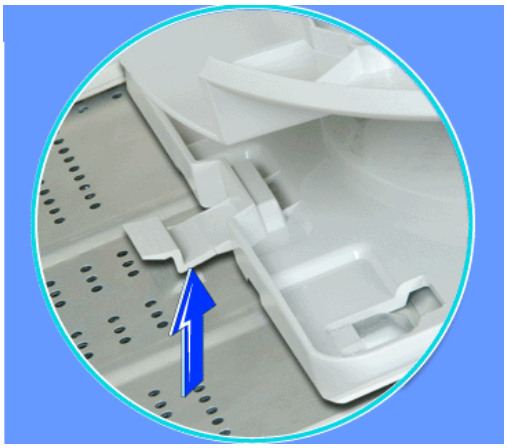
4. Push the base toward the front of the monitor until the release latch clicks into the locked position.
* Do not bend the snap.

Setup

Base Installation

Attaching and Removing the Bose

2 Removing the Base



5. Squeeze and pull up on the release latch on the base.

6. Push the base toward the back of the monitor and lift up to remove the base.

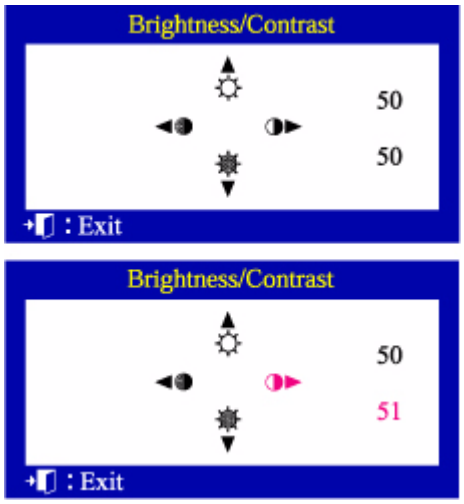
Note: The base will align with the monitor slots in only one position.

On-Screen Display

1. **Highlight button:** The Highlight Zone ensures clear images on TVs, video conferencing systems or photos by emphasizing a certain area on the screen.
2. **Exit button:** Use this button to Exit the active menu or the OSD.
3. **Adjust buttons:** These buttons allow you to highlight and adjust items in the menu.
4. **Menu button:** Use this button to open the OSD and activate a highlighted menu item.

On-Screen Display

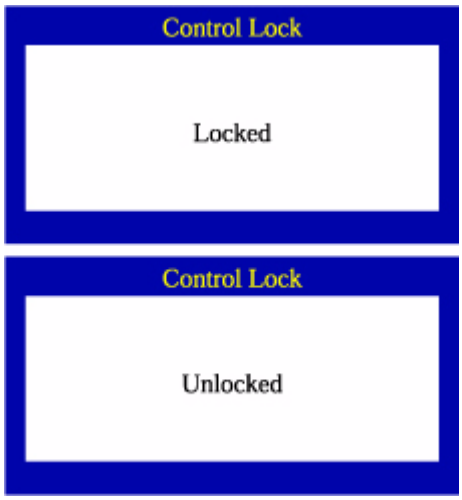
Menu	How to adjust



Brightness/Contrast

Adjust Brightness and Contrast.

1 Push the ◀▶ (◑) or ▲▼ (☼) button. The brightness/contrast display will appear.
2 Push the ▲ button to increase the brightness or the ▼ button to decrease the brightness.
3 Push the ◀ button to increase the contrast or the ▶button to decrease the contrast.

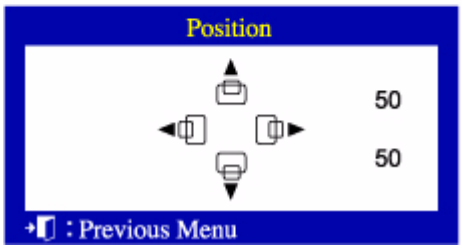


OSD lock/unlock

1 Push and hold in the Menu (↵) button for 10 seconds or more to Lock the OSD.
(In this case, even if you click the Menu button(↵), the control screen will not be printed.)
2 Push and hold in the Menu (↵) button for 10 seconds or more to UnLock the OSD.

On-Screen Display

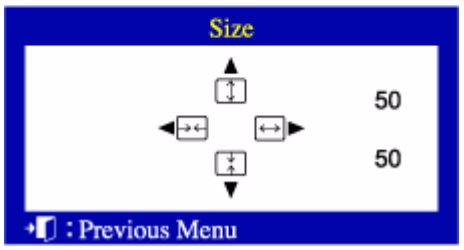
Menu	How to adjust



Position

Follow these instructions to change the Position of the monitor's entire display.

1 Push the Menu(↵) button.
2 Push the Menu(↵) button to open the Position adjustment screen.
3 Use the ▲ and ▼ buttons to change the vertical position of the monitor's viewing area; use the ◀ and ▶ buttons to change the horizontal position of the monitor's viewing area.



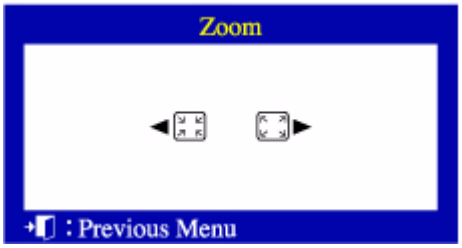
Size

Follow these instructions to change the size of the monitor's entire display.

1 Push the Menu(↵) button.
2 Push the ◀ button or ▶ button until the Position/Size screen is displayed. push the ▲ button or ▼ button to select Size.
3 Push the Menu(↵) button to open the Size adjustment screen.
4 Use the ▲ and ▼ buttons to change the vertical size of the monitor's viewing area; use the ◀ and ▶ buttons to change the horizontal size of the monitor's viewing area.

On-Screen Display

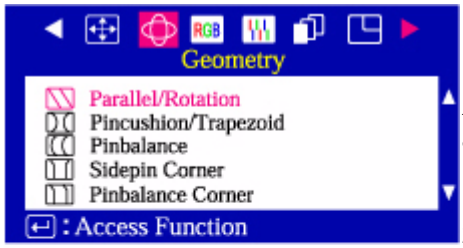
Menu	How to adjust

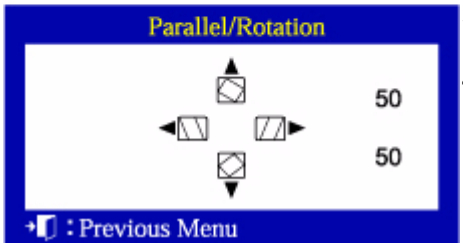


Zoom

Follow these instructions to get a close-up or a longshot view of the monitor's viewing area.

1 Push the Menu (↵) button.
2 Push the ◀ button or ▶ button until the Position/Size screen is displayed.
Push the ▲ button or ▼ button to select zoom.
3 Push the Menu (↵) button to open the zoom adjustment screen.
4 Use the ◀ button to decrease the screen viewing area.
Use the ▶ button to enlarge the screen viewing area.





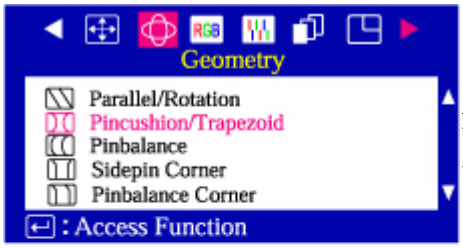
Parallel/Rotation

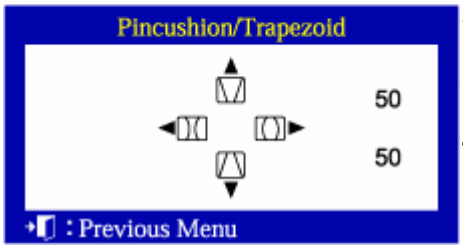
Adjust the parallelogram setting when the display is leaning left or right; adjust the rotation setting when the entire display is tilted left or right.

1 Push the Menu (↵) button.
2 Push the ◀ button or ▶ button until the Geometry screen is displayed.
3 Push the Menu (↵) button to open the Parallel/Rotation adjustment screen.
4 Use the ◀ button or ▶ button to adjust the parallel setting;
Use the ▲ button or ▼ button to adjust the rotation setting.

On-Screen Display

Menu	How to adjust

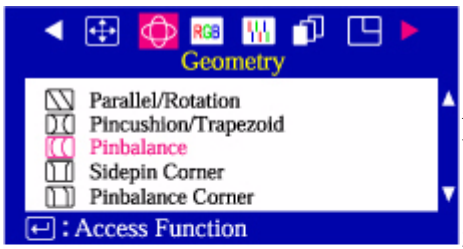


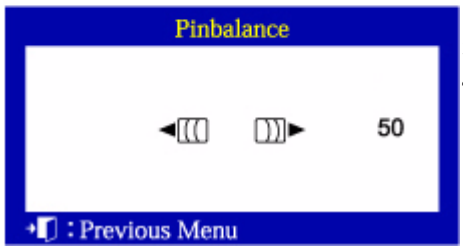


Pincushion/Trapezoid

Adjust the pincushion setting when the sides of the display are bowed in or bowed out; adjust the trapezoid setting when the top or bottom of the display is too large or small.

1 Push the Menu (↵) button.
2 Push the ◀ button or ▶ button until the Geometry screen is displayed.
push the▲ button or ▼ button to select Pincushion/Trapezoid.
3 Push the Menu (↵) button to open the Pincushion/Trapezoid adjustment screen.
4 Use the ◀ button or ▶ button to adjust the pincushion setting;
Use the ▲ button or ▼ button to adjust the trapezoid setting.





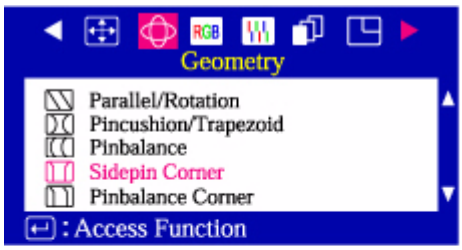
Pinbalance

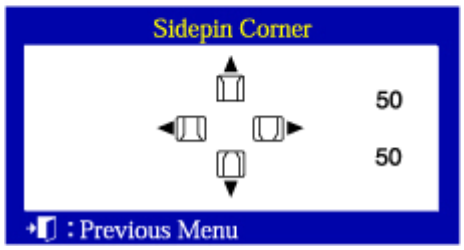
Adjust the pinbalance setting when the sides of the display are bowed towards the left or right.

1 Push the Menu (↵) button.
2 Push the ◀ button or ▶ button until the Geometry screen is displayed.
Push the ▲ button or ▼ button to select Pinbalance.
3 Push the Menu (↵) button to open the Pinbalance adjustment screen.
4 Use the ◀ button or ▶ button to adjust the Pinbalance setting.

On-Screen Display

Menu	How to adjust

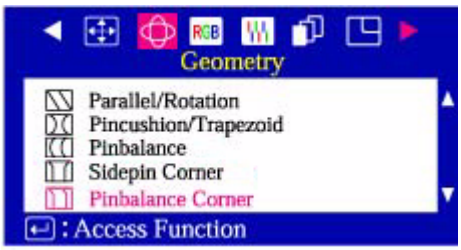


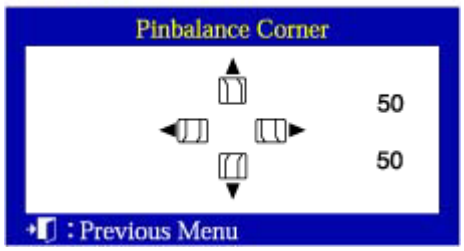


Sidepin Corner

Adjust the sidepin corner correction when the sides of the display are bowed in or bowed out; adjust the side pin corner correction when the top or bottom of the display is too large or small.

1 Push the Menu(↵) button.
2 Push the ◀ button or ▶ button until the Geometry screen is displayed. Push the ▲ button or ▼ button to select SidePin Corner.
3 Push the Menu(↵) button to open the SidePin Corner adjustment screen.
4 Use the ◀▶ or ▲▼ buttons to adjust the SidePin Corner correction.





Pinbalance Corner

Adjust the Pinbalance Corner correction when the sides of the display are bowed in or bowed out; adjust the side pinbalance corner correction when the top or bottom of the display is too large or small.

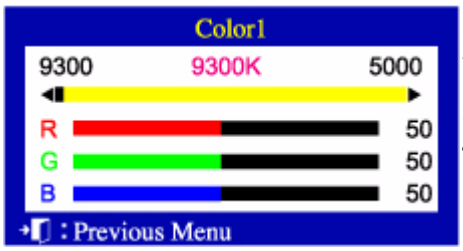
1 Push the Menu(↵) button.
2 Push the ◀ button or ▶ button until the Geometry screen is displayed. Push the ▲ button or ▼ button to select Pinbalance Corner.
3 Push the Menu(↵) button to open the Pinbalance Corner adjustment screen.
4 Use the ◀▶ or ▲▼ buttons to adjust the Pinbalance Corner correction.

On-Screen Display

Menu	How to adjust

Color1

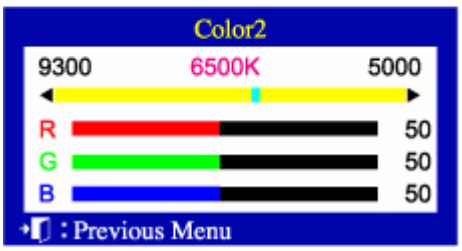
Color temperature is a measure of the 'warmth' of the image colors.
The available range is between 5000 to 9300K. Follow these steps to change the color temperature and adjust individual R,G,B color control.
Note: Recall does not reset the color settings.



1 Push the Menu(↵) button.
2 Push the ◀ button or ▶ button until the Color screen is displayed.
Use the▲ button or ▼ button to select Color1.
3 Push the Menu(↵) button to open the Color1 adjustment screen.
4 Adjust the color temperature as close to the desired temperature as possible using only the ◀ and ▶ buttons. To fine tune the color hue, use the▲ or ▼ button to select R(ed), G(reen) or B(lue), then use the ◀ and ▶ buttons until you reach the desired color.

Color2

Color temperature is a measure of the 'warmth' of the image colors. The available range is between 5000 to 9300K. Follow these steps to change the color temperature and adjust individual R,G,B color control.
Note: Recall does not reset the color settings.



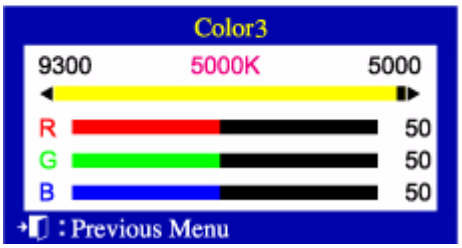
1 Push the Menu(↵) button.
2 Push the ◀ button or ▶ button until the Color screen is displayed.
Use the▲ button or ▼ button to select Color2.
3 Push the Menu(↵) button to open the Color2 adjustment screen.
4 Adjust the color temperature as close to the desired temperature as possible using only the ◀ and ▶ buttons.
To fine tune the color hue,use the▲ or ▼ button to select R(ed), G(reen) or B(lue), then use the ◀ and ▶ buttons until you reach the desired color.

On-Screen Display

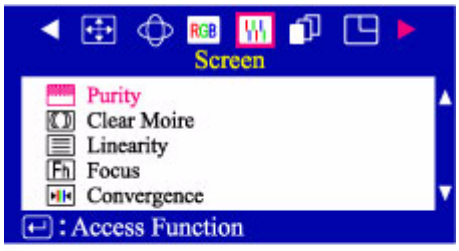
Menu	How to adjust

Color3

Color temperature is a measure of the 'warmth' of the image colors.
The available range is between 5000 to 9300K. Follow these steps to change the color temperature and adjust individual R,G,B color control.
Note: Recall does not reset the color settings.

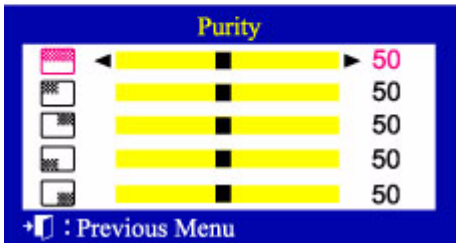


1 Push the Menu(↵) button.
2 Push the ◀ button or ▶ button until the Color screen is displayed.
Use the▲ button or ▼ button to select Color3.
3 Push the Menu(↵) button to open the Color3 adjustment screen.
4 Adjust the color temperature as close to the desired temperature as possible using only the ◀ and ▶ buttons.
To fine tune the color hue,use the ▲or ▼button to select R(ed), G(reen) or B(lue), then use the ◀ and ▶ buttons until you reach the desired color.



Purity

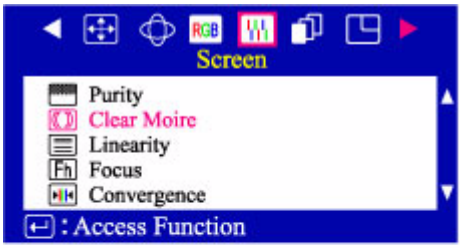
Adjust the color purity of the picture.

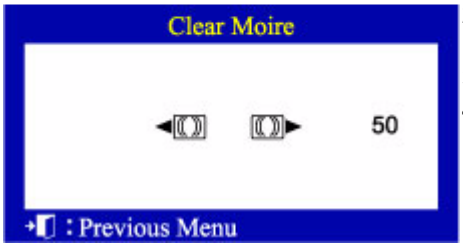


1 Push the Menu(↵) button.
2 Push the ◀ button or ▶ button until the Screen OSD is displayed.
3 Push the Menu(↵) button to open the Purity adjustment screen.
4 Use the ▲ button or ▼ button to select the adjustment area, and the ◀ button or ▶ button to perform the adjustment.

On-Screen Display

Menu	How to adjust

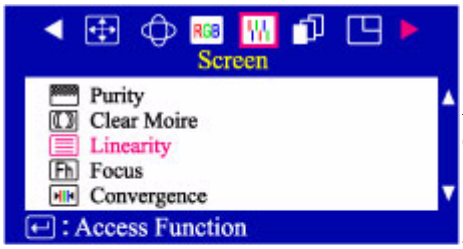


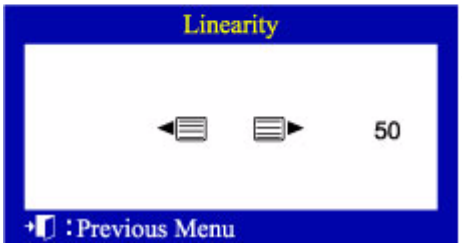


Clear Moire

A 'moire' pattern can appear on your screen, looking like a series of concentric circles or arcs.
To eliminate this pattern, use the clear moire adjustments.

1 Push the Menu(↵) button.
2 Push the ◀ button or ▶ button until the Screen OSD is displayed.
Push the ▲ button or ▼ button to select Clear Moire.
3 Push the Menu(↵) button to open the Clear Moire adjustment screen.
4 Use the ◀ button or ▶ button to adjust horizontal moire;
use the ▲ button or ▼ button to adjust vertical moire.





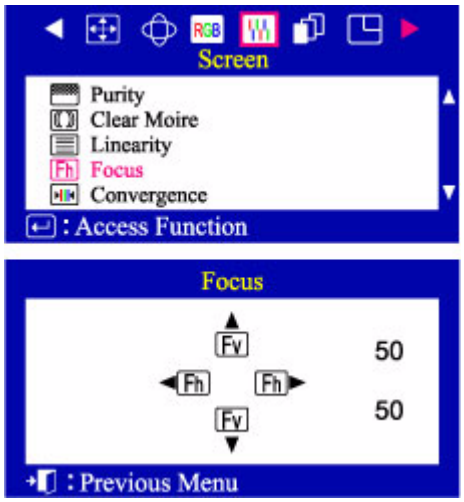
Linearity

Adjust the linearity setting when the display image is compressed at the left,right or top,bottom.

1 Push the Menu(↵) button.
2 Push the ◀ button or ▶ button until the Screen OSD is displayed.
Push the ▲ button or ▼ button to select Linearity.
3 Push the Menu(↵) button to open the Linearity adjustment screen.
4 Use the ◀ button or ▶ button to adjust the vertical Linearity.

On-Screen Display

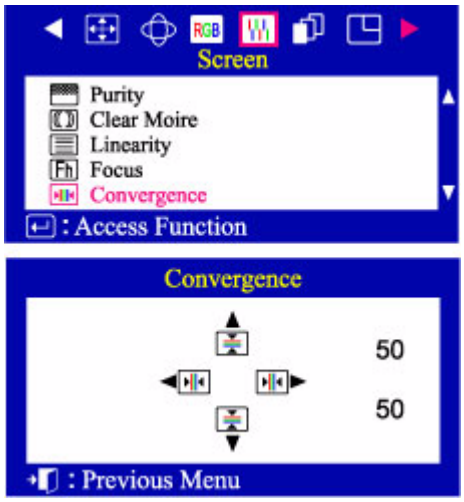
Menu	How to adjust



Focus

Use the focus control when the image displayed on the screen is not sharp in all areas.

1 Push the Menu (↵) button.
2 Push the ◀ button or ▶ button until the Screen OSD is displayed.
Push the ▲ button or ▼ button to select Focus.
3 Push the Menu (↵) button to open the Focus adjustment screen.
4 Use the ◀ button or ▶ button to adjust the focus along the left and right areas of the screen.
Use the ▲ button or ▼ button to adjust the center area of the screen.



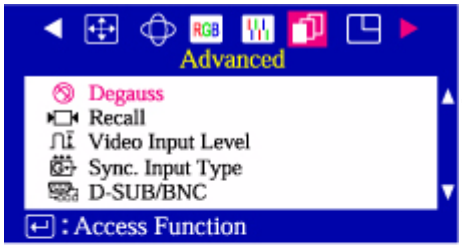
Convergence

Convergence affects picture clarity. Adjust the horizontal or vertical convergence to properly align the color dots that make up the image.

1 Push the Menu (↵) button.
2 Push the ◀ button or ▶ button until the Screen OSD is displayed.
Push the ▲ button or ▼ button to select Convergence.
3 Push the Menu (↵) button to open the Convergence adjustment screen.
4 Use the ◀ button or ▶ button to adjust the horizontal convergence.
Use the ▲ button or ▼ button to adjust the vertical convergence.

On-Screen Display

Menu	How to adjust

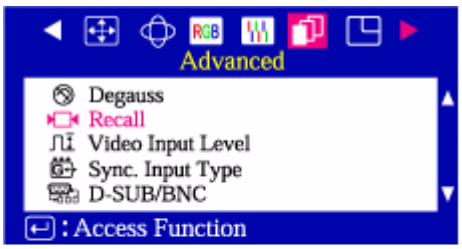


Degauss

The Degauss feature will remove color impurities caused by magnetic fields. Do not use the Degauss feature more than once within a 30-minute period.

Note: The monitor may buzz momentarily, the image colors may change and the image will jiggle for a few seconds. These effects are normal.

1 Push the Menu(↵) button.
2 Push the ◀ button or ▶ button until the Advanced screen is displayed.
3 Push the Menu(↵) button to execute the degauss function.
The degaussing screen will appear. After a few seconds, the degauss main menu will return.



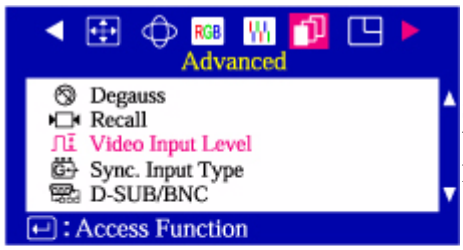
Recall

Use the recall feature to reset these monitor settings to their original levels: Position, Size, Pincushion, Trapezoid, Parallelogram, Pinbalance, Rotation, Clear Moire.
Note: If you have selected "Yes", all settings listed above will be reset. All other settings will remain the same.

1 Push the Menu(↵) button.
2 Push the ◀ button or ▶ button until the Advanced screen is displayed.
Push the ▲ button or ▼ button to select Recall.
3 Push the Menu(↵) button to open the recall selection screen.
4 Push the ◀ button to select YES.
If you don't want to reset the monitor,use the ▶ button to select NO.

On-Screen Display

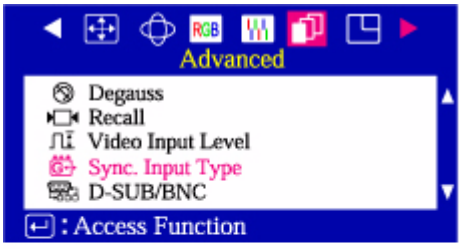
Menu	How to adjust

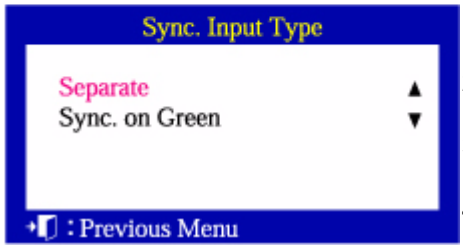


Video Input Level

Some video cards use video signals higher than 1.0V which causes the display to be very bright.
For those video cards, use this feature to select the 1.0 V Level.

1 Push the Menu (↵) button.
2 Push the ◀ button or ▶ button until the Advanced screen is displayed. Push the ▲ button or ▼ button to select Video Input Level.
3 Push the Menu (↵) button to open the Video Input Level selection screen.
4 Use the ◀ or ▶ buttons to select 0.7 V or 1.0 V.





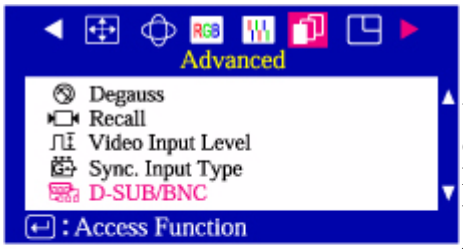
Sync. Input Type (Option)

Use this menu to set your monitor to the correct type of synchronization. Select 'Separate' if the computer is sending a separate synchronization signal. Select 'Sync. on Green' if the computer expects the monitor to synchronize with the green signal it sends. Refer to your computer or video card user's manual to determine the correct setting.

1 Push the Menu (↵) button.
2 Push the ◀ button or ▶ button until the Advanced screen is displayed. Push the ▲ button or ▼ button to select Sync. Input Type.
3 Push the Menu (↵) button to open the Sync. Input Type selection screen.
4 Use the ▲ button or ▼ button to select Separate or Sync. on Green.

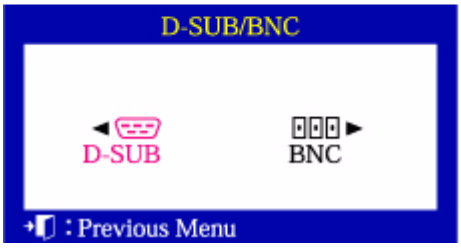
On-Screen Display

Menu	How to adjust



D-SUB/BNC(Option)

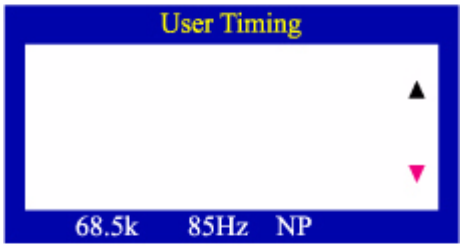
Use this menu to choose between the signal source connected to the BNC connector input and the signal source connected to the D-SUB connector input.
Note: When you are finished, wait for a few seconds and the screen will blank then display the image from the new signal source(other computer).
A cable must be connected to both inputs to use this function.

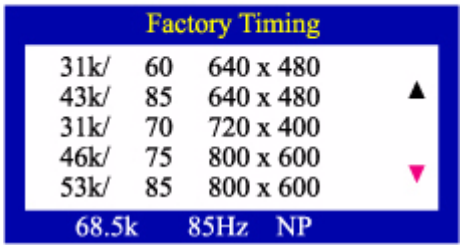


1 Push the Menu (↵) button.
2 Push the ◀ button or ▶ button until the Advanced screen is displayed. Push the ▲ button or ▼ button to select D-SUB/BNC.
3 Push the Menu (↵) button to open the D-SUB/BNC selection screen.
4 Use the ◀ button or ▶ button to select D-SUB or BNC.

Display timing

You can see the frequency (user control mode) used by the user, the polarity of the operational signals, the default frequency (default mode) set when you buy the monitor and the resolution level.
Note: These screens do not allow any changes to the settings, they are for information only.

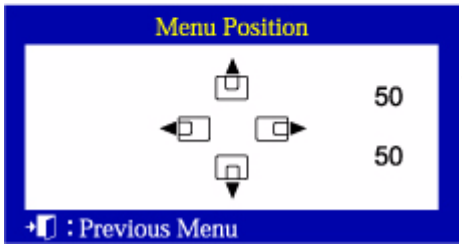




1 Push the Menu (↵) button.
2 Push the ◀ button or ▶ button until the Menu screen is displayed.
3 Push the Menu (↵) button to open the Display Timing adjustment screen.
4 Use the ▼ button to see the user control mode and the default mode.

On-Screen Display

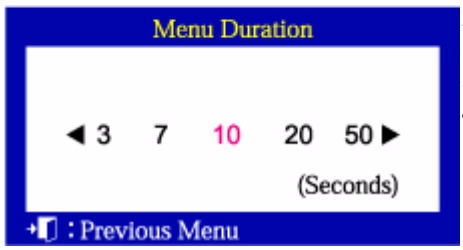
Menu	How to adjust



Menu Position

You can change the position where the OSD menu appears on your monitor.

1 Push the Menu(↵) button.
2 Push the ◀ button or ▶ button until the Menu screen is displayed.
Push the ▲ button or ▼ button to select Menu Position.
3 Push the Menu(↵) button to open the Menu Position adjustment screen.
4 Use the▲▼ button or ◀▶ button to place the menu in the position you prefer.



Menu Duration

The menu will automatically turn off if no adjustments are made for a certain time period.
You can set the amount of time the menu will wait before it turns off.

1 Push the Menu (↵) button.
2 Push the ◀ button or ▶ button until the Menu screen is displayed.
Push the ▲ button or ▼ button to select Menu Duration.
3 Push the Menu (↵) button to open the Menu Duration selection screen.
4 Use the ◀ or ▶ buttons to select 3, 7, 10, 20 or 50 seconds.
10 seconds is the default value.

On-Screen Display

Menu	How to adjust

Languages

Follow these steps to change the language used in the menu. You can choose one of ten languages. English, German,French, Italian, Portuguese, Spanish, Swedish, Russian, Polish ,or Magyar.
(Some OSD languages may not appear in some areas.)
The language chosen affects only the language of the OSD. It has no effect on any software running on the computer.

1 Push the Menu (↵) button.
2 Push the ◀ button or ▶ button until the Menu screen is displayed.
Push the ▲ button or ▼ button to select Languages.
3 Push the Menu (↵) button to open the Languages selection screen.
4 Use the ▲button or ▼button to select the language you would like to use.

On-Screen Display

The Highlight Zone function can be optimized with a moving image and so please use it in the moving image screen.

Menu	How to adjust

Highlight

This function is to execute or cancel the Highlight Zone.

1 Push the Highlight ( ) button.
2 Push the Menu ( ) button.
3 Push the ◀ button or ▶ button to cancel, execute or enlarge the entire screen.

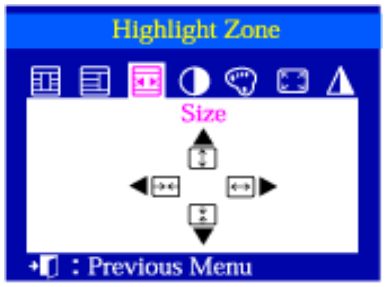
Position

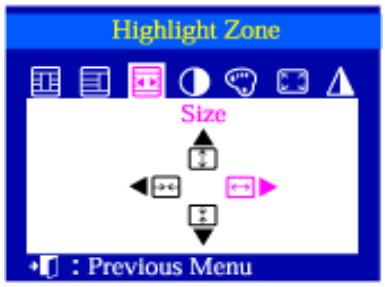
This function is to move the Highlight Zone horizontally or vertically.

1 Push the Highlight ( ) button.
2 Push the◀button or▶button to select the Screen Position Adjustment and then push the Menu ( ) button.
3 Push the ◀ button or ▶ button to move the position of the Highlight Zone horizontally and use the push the ▲ button or ▼ button to move it vertically.

On-Screen Display

Menu	How to adjust





Size

This function is to adjust the size of the Highlight Zone.

1 Push the Highlight ( ) button.
2 Push the ◀ button or ▶ button to select the Screen Size Adjustment and then push the Menu ( ) button.
3 Push the ◀ button or ▶ button to move the size of the Highlight Zone horizontally and use the push the ▲ button or ▼ button to move it vertically.

Contrast

This function is to use the Contrast of the Highlight Zone.

1 Push the Highlight ( ) button.
2 Push the ◀ button or ▶ button to select the Contrast Adjustment and then push the Menu ( ) button.
3 Push the ◀ button or ▶ button to adjust the Contrast of the Highlight Zone.

On-Screen Display

Menu	How to adjust

Color

This function is to adjust the color of the Highlight Zone.

1 Push the Highlight ( ) button.
2 Push the ◀ button or ▶ button to select the Color Adjustment and then push the Menu ( ) button.
3 Push the ▲ button or ▼ button to select a color from R, G or B. Push the ◀ button or ▶ button to adjust the R, G or B color of the Highlight Zone.

Zoom

This function is to enlarge or reduce the Highlight Zone.

1 Push the Highlight ( ) button.
2 Push the ◀ button or ▶ button to select theEnlargement and Reduction Adjustment and then push the Menu ( ) button
3 Push the ◀ button or ▶ button to enlarge or reduce the Highlight Zone.

On-Screen Display

Menu	How to adjust

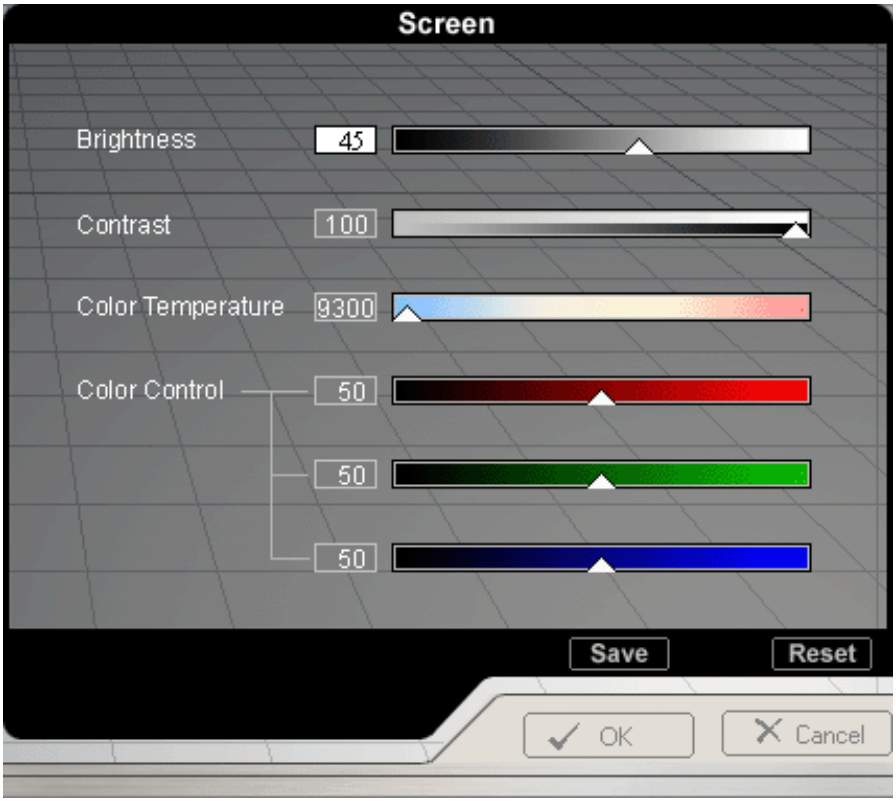
Sharpness

This function is to adjust the sharpness of the Highlight Zone.

1 Push the Highlight ( ) button.
2 Push the ◀ button or ▶ button to select the Sharpness Adjustment and then push the Menu ( ) button
3 Push the ◀ button or ▶ button to adjust the sharpness of the Highlight Zone.

On-Screen Display

Screen



1. Brightness

This setting allows you to adjust screen brightness for better viewing, depending on your lighting conditions, etc.

2. Contrast

This setting allows you to adjust screen contrast for better viewing, depending on the image and colors on the screen.
As the contrast value approaches 0, the picture becomes too dark to see clearly. Therefore, this value should be 25 or higher.

3. Color Temperature

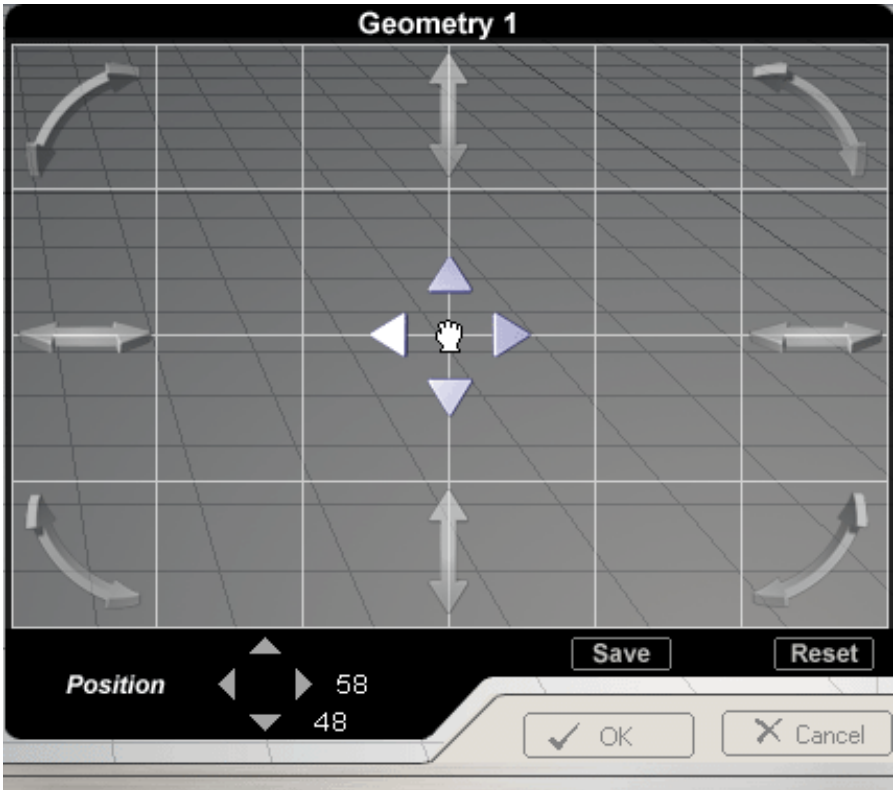
This setting adjusts the color temperature (also known as 'warmth'), in a range from 9300K (bluish hue) to 5000K (reddish hue).

4. Color Control

This setting adjusts the picture color tone by controlling each of the individual RGB hues.

On-Screen Display

Geometry 1



Position

This setting adjusts the vertical or horizontal position of the image area on the screen.

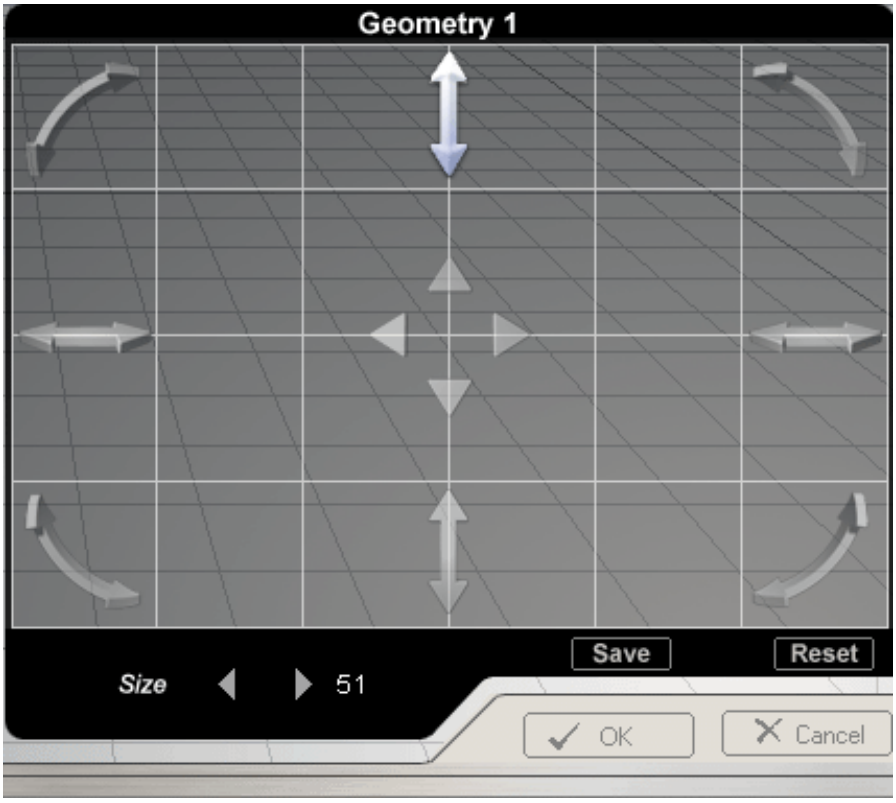
1. Selection and Adjustment : Place and click your mouse pointer on the Position icon and then drag it as desired. The entire image area of the screen will move freely in any direction, according to the mouse cursor movement.

2. Fine Tuning : When the mouse pointer is correctly placed over the Position icon, the icon color will change. Then, click the left mouse button. The fine tuning sub-menu appears in the bottom left corner of the screen. When the mouse cursor is correctly placed over any of the fine tuning arrows, the arrow color changes, as it does when an icon is selected. Click the left mouse button to achieve the desired Position fine tuning.

3. Holding the mouse button down will cause the value to change rapidly.

On-Screen Display

Geometry 1



Size

This setting adjusts the image area height and width on the screen.

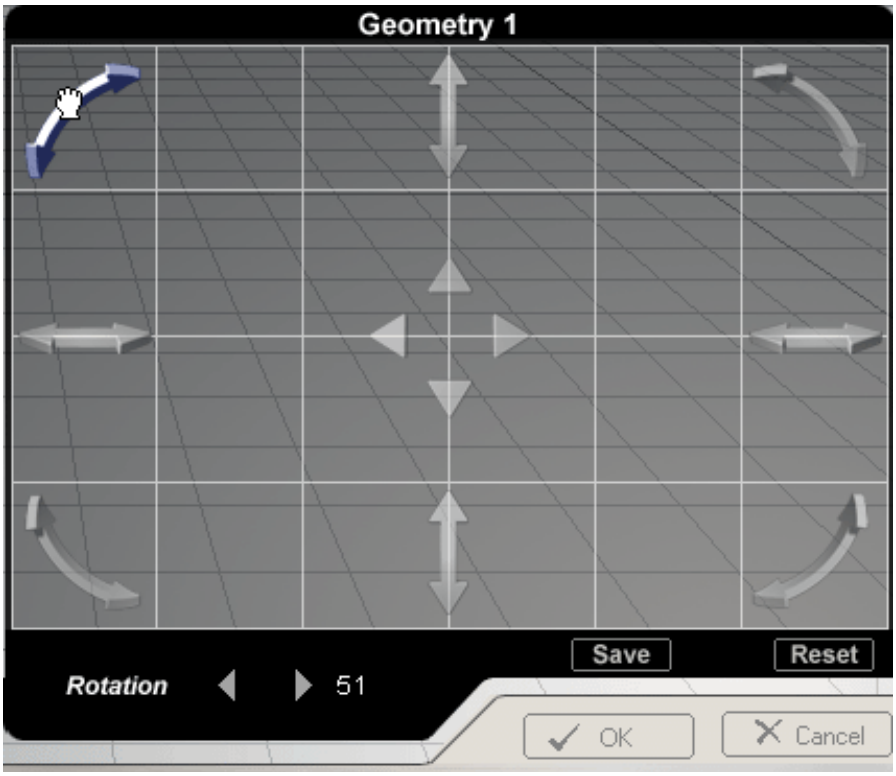
1. Selection and Adjustment : Place and click your mouse cursor on the Size icon and then drag it as desired. The Horizontal Size (Width) adjustment icon is located on the left and right sides and the Vertical Size (Height) adjustment icon is located on the top and bottom parts of the screen. To increase the Width, drag outward on the grid where the icons are located. To decrease the Width, drag inward. To increase the Height, drag upward on the grid where the icons are located. To decrease the Height, drag downward.

2. Fine Tuning : When the mouse pointer is correctly placed over the Size icon, the icon color changes. Then, click the left mouse button. The fine tuning sub-menu appears in the bottom left corner of the screen. When the mouse cursor is correctly placed over any of the Size fine tuning arrows, the arrow color changes, as it does when an icon is selected. Then, click the left mouse button to achieve the desired Size fine tuning.

3. Holding the mouse button down will cause the value to change rapidly.

On-Screen Display

Geometry 1



Rotation

This corrects the skewed image area on the screen.

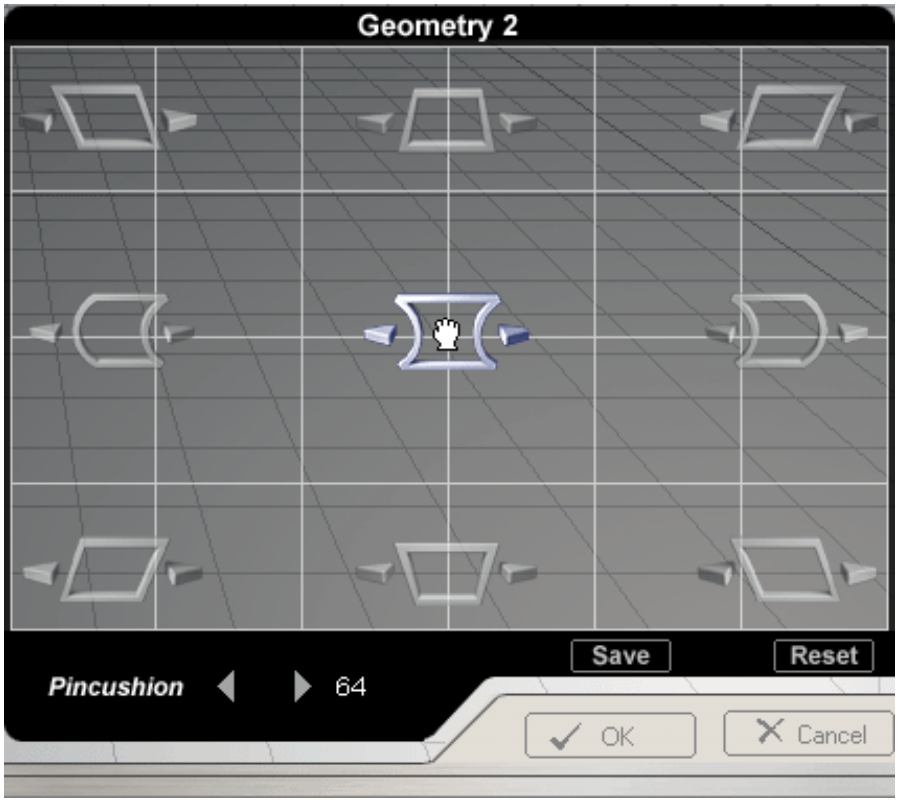
1. Selection and Adjustment : Place and click your mouse pointer on the Rotation icon and then drag as desired. The Rotation icon is located at the corners of the screen. To de-skew the image area, drag the mouse along the direction of the arrow.

2. Fine Tuning : When the mouse pointer is correctly placed over the Rotation icon, the icon color changes. Then, click the left mouse button. The fine tuning sub-menu appears in the left bottom corner of the screen. When the mouse cursor is correctly placed over either of the left or right arrows, the arrow color changes, as it does when an icon is selected. Then, click the left mouse button to achieve the desired Rotation fine tuning.

3. Holding the mouse button down will cause the value to change rapidly.

On-Screen Display

Geometry 2



Pincushion

This setting straightens the right and left vertical pins of the screen.

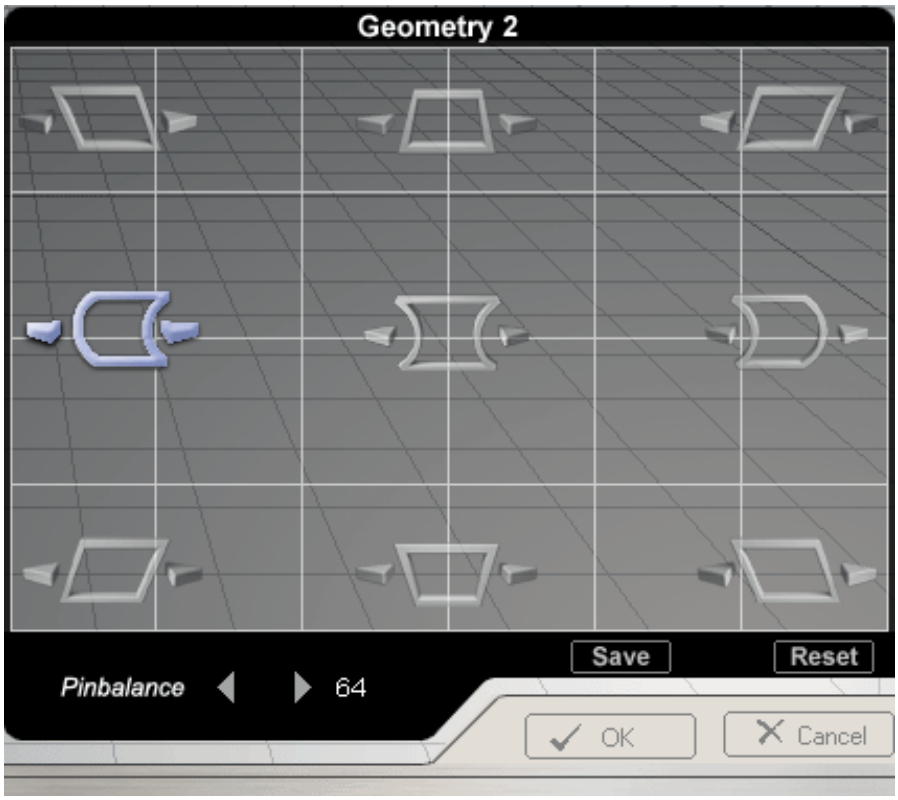
1. Selection and Adjustment : Place and click the mouse pointer on the Pincushion icon and then drag it as desired. The Pincushion icon is located in the center of the screen. If the mouse is dragged to the left, the image area becomes convex. If the mouse is dragged to the right, the image area becomes concave.

2. Fine Tuning : When the mouse pointer is correctly placed over the Pincushion icon, the icon color changes. Then, click the left mouse button and the Pincushion fine tuning sub-menu appears in the bottom left corner of the screen. When the mouse cursor is correctly placed over any of the Pincushion fine tuning arrows, the arrow color changes, as it does when an icon is selected. Then, click the left mouse button to achieve the desired fine tuning.

3. Holding the mouse button down will cause the value to change rapidly.

On-Screen Display

Geometry 2



Pinbalance

This corrects the pin balance of the left and right side of the screen.

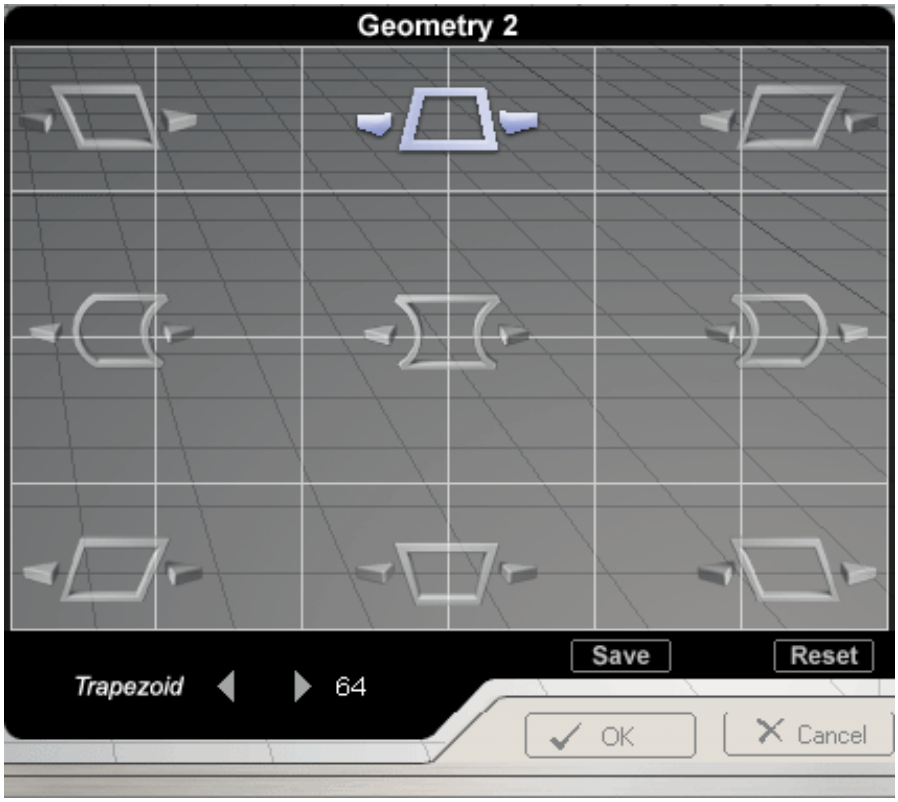
1. Selection and Adjustment : Place and click your mouse pointer on the Pin Balance icon and then drag it as desired. The Pin Balance icon is located in the left and right corner. If the mouse is dragged to the left, the image area tilts to the left. If the mouse is dragged to the right, the image area becomes tilts to the right.

2. Fine Tuning : When the mouse pointer is correctly placed over the Pin Balance icon, the icon color changes. Then, click the left mouse button and the Pin Balance fine tuning sub-menu appears in the left bottom corner of the screen. When the mouse cursor is correctly placed over either of the left or right arrows, the arrow color changes, as it does when an icon is selected. Then, click the left mouse button to achieve the desired Pin Balance fine tuning.

3. Holding the mouse button down will cause the value to change rapidly.

On-Screen Display

Geometry 2



Trapezoid

This adjusts the horizontal width of the image area on the screen.

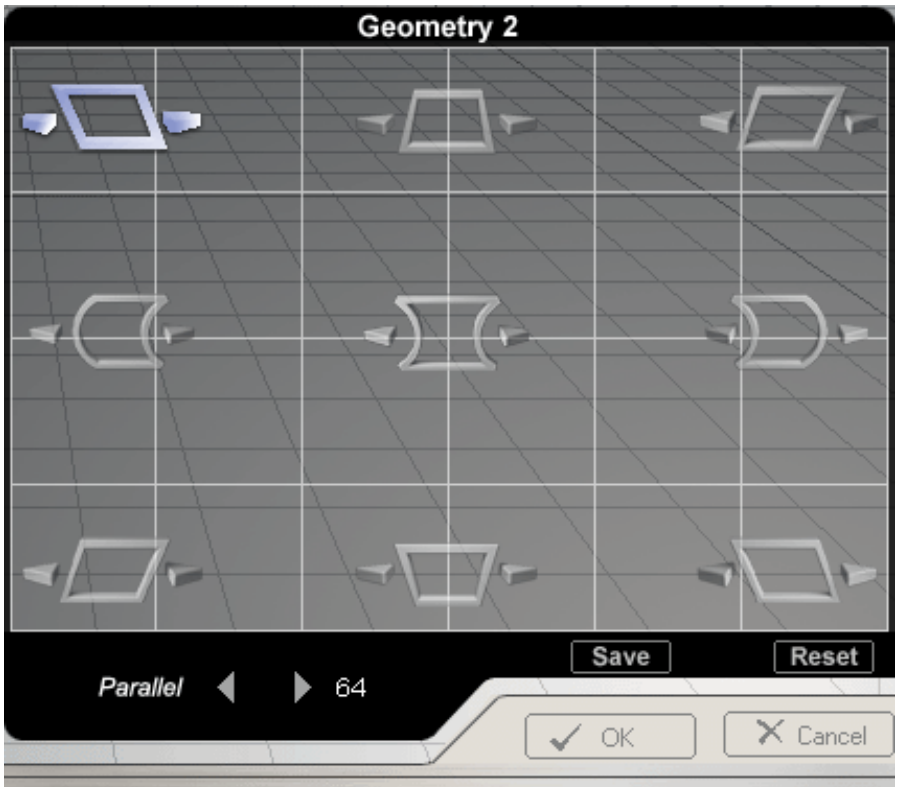
1. Selection and Adjustment : Place and click the mouse pointer on the Trapezoid icon and then drag it as desired. The Trapezoid icon is located on the top and bottom sides. If the mouse is dragged to the left, the upper image area narrows and the bottom part widens. If the mouse is dragged to the right, the upper image area widens and the bottom part narrows.

2. Fine Tuning : When the mouse pointer is correctly placed over the Trapezoid icon, the icon color changes. Then, click the left mouse button and the Trapezoid fine tuning sub-menu appears in the left bottom corner of the screen. When the mouse cursor is correctly placed over either of the left or right arrows, the arrow color changes, as it does when an icon is selected. Then, click the left mouse button to achieve the desired Trapezoid fine tuning.

3. Holding the mouse button down will cause the value to change rapidly.

On-Screen Display

Geometry 2



Parallel

This adjusts the parallelogram level of the screen.

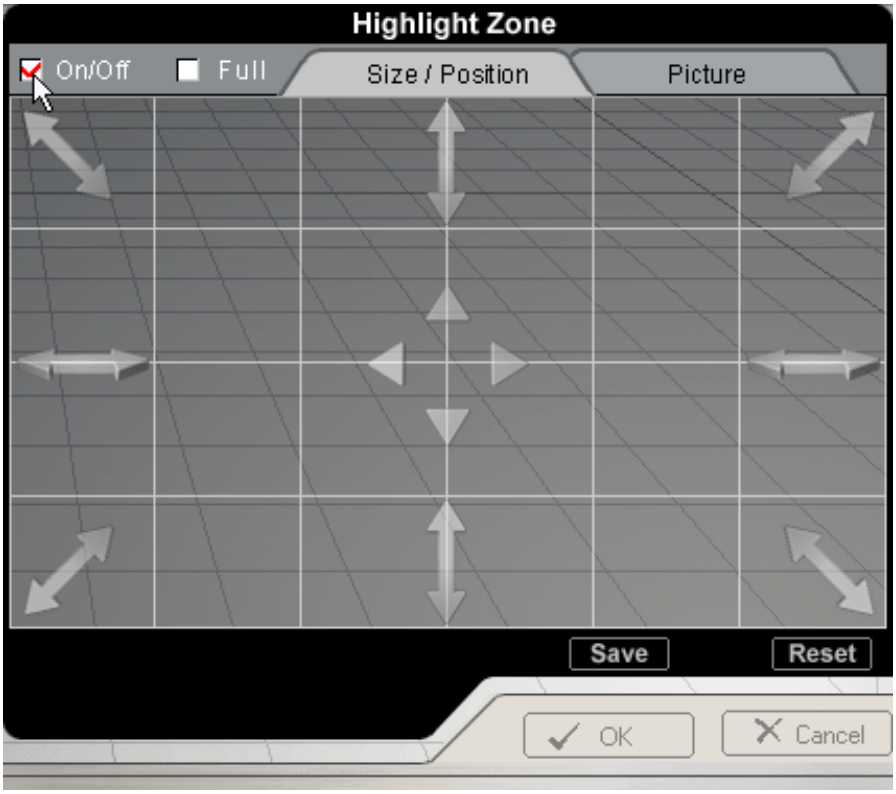
1. Selection and Adjustment : Place and click the mouse pointer on the Parallelogram icon and then drag as desired. The Parallelogram icon is located in the screen corners. If the mouse is dragged to the left, the image area tilts to the right. If the mouse is dragged to the right, the image area tilts to the left.

2. Fine Tuning : When the mouse pointer is correctly placed over the Parallelogram icon, the icon color changes. Then, click the left mouse button to pop up the Parallelogram fine tuning sub-menu in the left bottom corner of the screen. When the mouse cursor is correctly placed over either of the left or right arrows, the arrow color changes, as it does when the icon is selected. Then, click the left mouse button to achieve the desired Parallelogram fine tuning.

3. Holding the mouse button down will cause the value to change rapidly.

On-Screen Display

Highlight Zone



On/Off

This setting turns the Highlight Zone on or off.

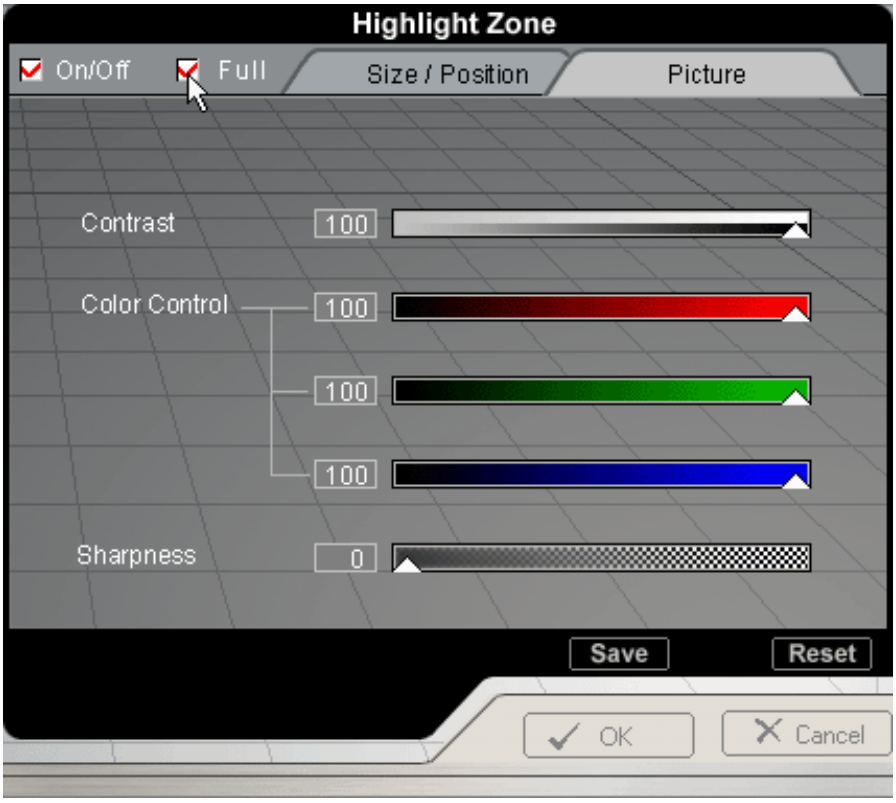
1. You can turn the Highlight Zone on or off by selecting the Highlight On/Off checkbox in the Highlight Zone. You can select menu functions in the Highlight Zone only when the Highlight Zone is turned on. You cannot select menu functions when this setting is off.

2. Highlight Zone on : As soon as you click the On checkbox, the Highlight Zone turns on, while the checkbox appears checked/selected.

3. Highlight Zone off : As soon as you click the Off checkbox, the checkbox will be unchecked and the Highlight Zone turns off.

On-Screen Display

Highlight Zone



Full Screen

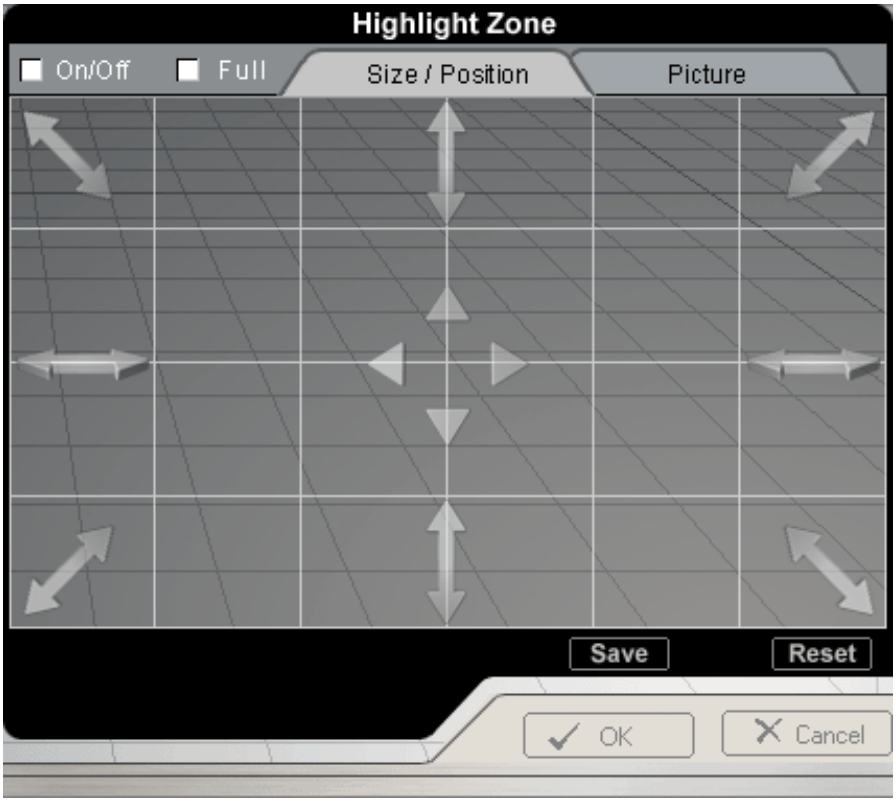
This setting enlarges the Highlight Zone to full screen mode.

1. Selection and Adjustment : The Highlight Zone changes to Full Screen mode when its checkbox is selected. Icons and other related functions may be selected, irrespective of whether the Highlight Zone is in On or Off mode. When the Highlight Zone is in Full mode, it enlarges to the entire screen area and is locked by the Picture icon because Position/Size adjustment is no longer required.

2. Deactivating Full Highlight Zone : When you click the Full checkbox again, in the Full mode, the Highlight Zone returns to the previous menu. If you wish to turn it off, you may select On/Off at this stage.

On-Screen Display

Highlight Zone



Position/Size Tab(Highlight Zone)

This setting adjusts the Highlight Zone's vertical or horizontal location, and shrinks or enlarges its size.

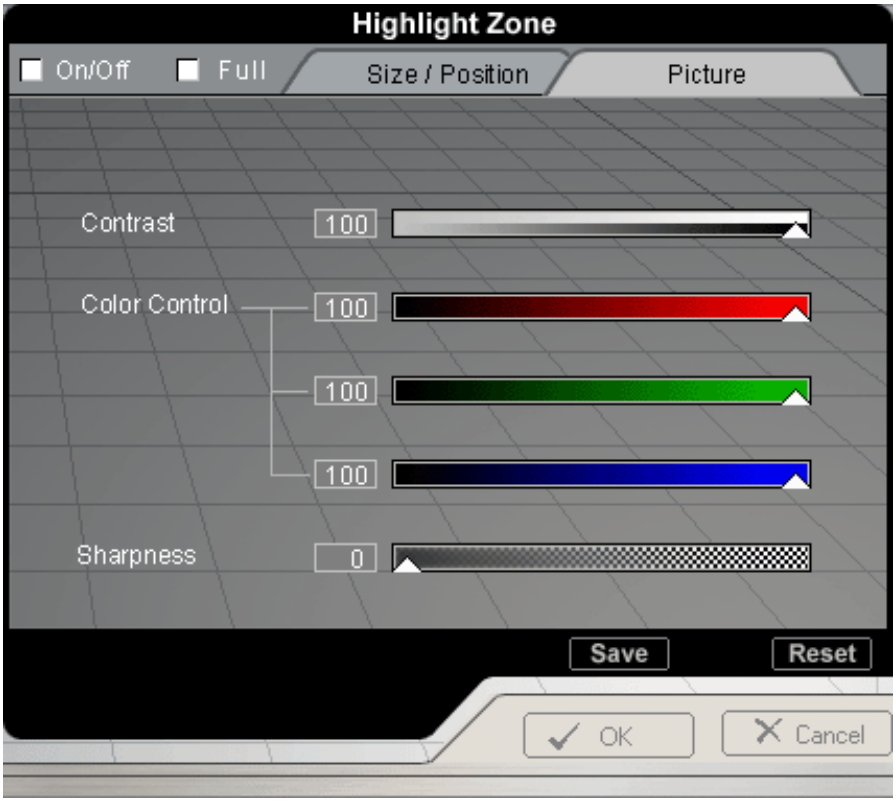
1. Position Adjustment : Place and click your mouse pointer on the Position icon and then drag it as desired. The Highlight Zone moves freely in any direction, following as the mouse is dragged.

2. Size Adjustment : Place and click your mouse cursor on the Size icon and then drag as desired. The Horizontal Size (Width) adjustment icon is located on the left and right sides and the Vertical Size (Height) adjustment icon is located on the top and bottom of the screen. Drag outward, along the grid where the icons are located, to increase the Highlight Zone's Width. Drag inward to decrease Width. Drag upward, along the grid where the icons are located, to increase the Highlight Zone's Height. Drag downward to decrease Height.

3. Zoom Adjustment : Place and click your mouse pointer on the Zoom icon and then drag it as desired. To adjust, drag in the direction of the Zoom icon arrow. Drag outward to increase the Highlight Zone. Drag inward to decrease it.

On-Screen Display

Highlight Zone



Picture Tab(Highlight Zone)

This setting complements the contrast, hue and outline of the Highlight Zone.
Place and click the mouse pointer on Picture Icon when the Highlight Zone is On.
The Picture tab adjusts the Highlight Zone's contrast, color tone and outline. Place your mouse pointer on the arrow for any of the desired menu icons and drag it as desired.
When the mouse pointer is correctly placed over the arrow, the pointer turns into a finger icon. Then, click the left mouse button and drag the icon as desired.

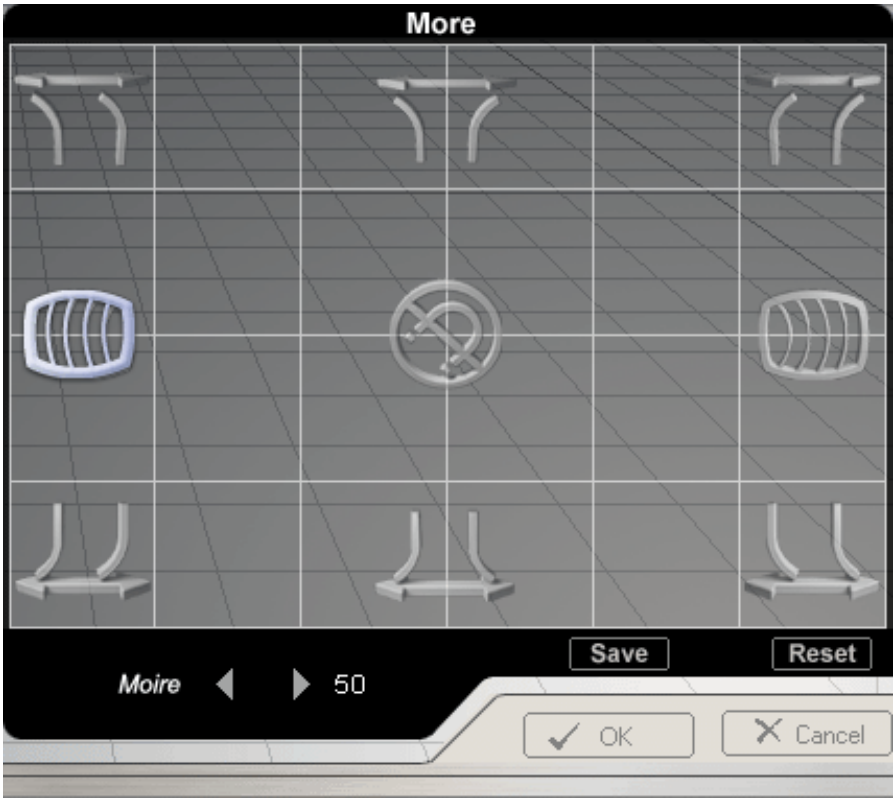
1. Contrast : This setting adjusts the contrast of the Highlight Zone from -100 to +100 to achieve the user's desired contrast.

2. Color : This setting adjusts the color of the Highlight Zone by Red, Green or Blue separately. This ensures that animated multimedia or photo images will be shown in the best color tones.

3. Sharpness : This setting sharpens or softens the outline of the Highlight Zone image.

On-Screen Display

More



Moire

This setting removes wavy concentric circles or arc patterns.

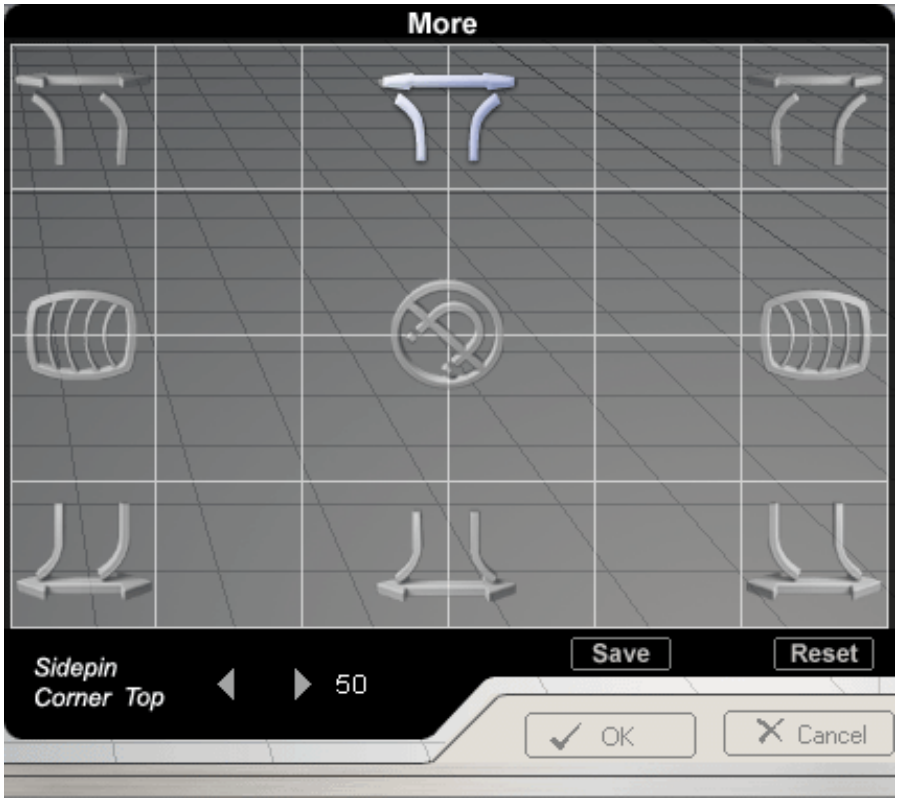
1. Selection and Adjustment : Place and click your mouse pointer on the Moire icon and then drag it as desired. The icon is located in the left and right corners of the screen. The value decreases when the arrow is dragged to the left, and increases when the arrow is dragged to the right.

2. Fine Tuning : When the mouse pointer is correctly placed over the Moire icon, the icon color changes. Then, click the left mouse button and its fine tuning sub-menu appears in the bottom left corner of the screen. When the mouse cursor is correctly placed over either of the left or right arrows, the arrow color changes, as it does when an icon is selected. Then, click your left mouse button to achieve the desired Moire fine tuning.

3. Holding the mouse button down will cause the value to change rapidly.

On-Screen Display

More



Sidepin Corner

This setting fine tunes the side pins of the screen corners in their opposite directions.

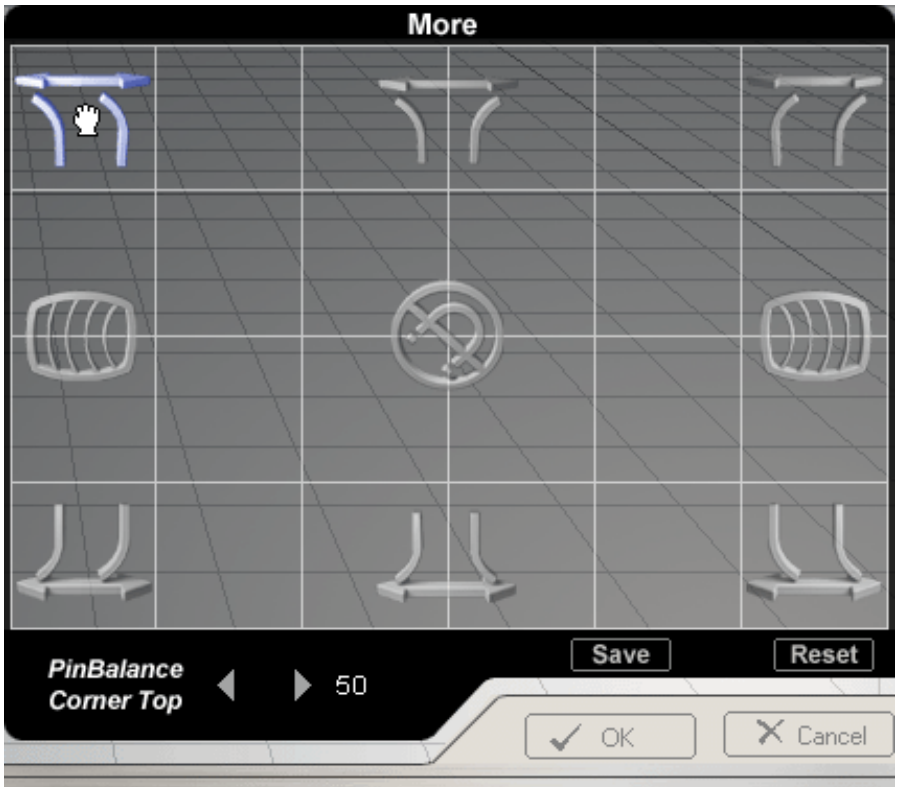
1. Selection and Adjustment : Place and click the mouse pointer on the Corner Side Pin icon and then drag it as desired. The icons are divided into Top and Bottom Corner Side Pin icons and are located in the upper and lower parts, respectively. The upper icon is for the Top Corner Side pin adjustment while the lower icon is for the Bottom Corner Side Pin adjustment. If the mouse is dragged to the left, for both the icons, the corner side pins shrink inward. If the mouse is dragged to the right, they expand outward.

2. Fine Tuning : When the mouse pointer is correctly placed over the Corner Side Pin icon, the icon color changes. Then, click the left mouse button and the Corner Side Pin fine tuning sub-menu appears in the bottom left corner of the screen. When the mouse cursor is correctly placed over either of the left or right arrows, the arrow color changes, as it does when an icon is selected. Then, click the left mouse button to achieve the desired fine tuning.

3. Holding the mouse button down will cause the value to change rapidly.

On-Screen Display

More



Pinbalance Corner

This setting fine tunes the side pins of the screen corners, by aligning them in the same direction.

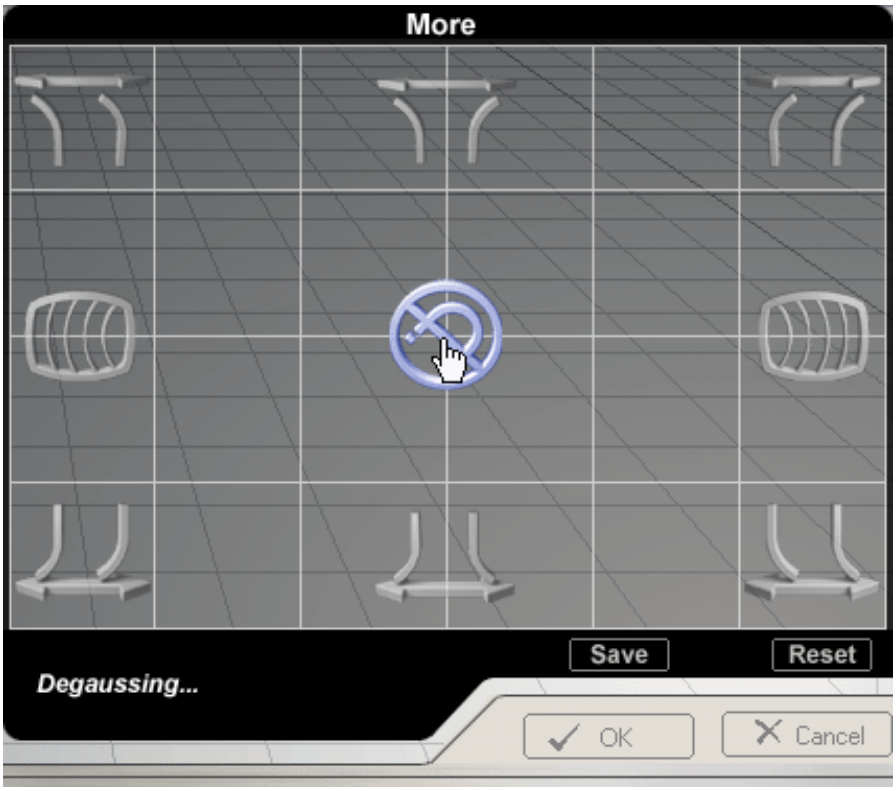
1. Selection and Adjustment : Place and click the mouse pointer on the Corner Pin Balance icon and drag it as desired. The Top Corner Pin Balance adjustment icon is located in the top left and right corners of the screen. The Bottom Corner Pin Balance adjustment icon is located in the bottom left and right corners of the screen. For both icons, if the mouse is dragged to the left, the corner side pins are curved to the left. If the mouse is dragged to the right, they are curved to the right.

2. Fine Tuning : When the mouse pointer is correctly placed over the Corner Pin Balance icon, the icon color changes. Then, click the left mouse button, and its fine tuning sub-menu appears in the bottom left corner of the screen. When the mouse cursor is correctly placed over either of the left or right arrows, the arrow color changes, as it does when an icon is selected. Then, click the left mouse button to achieve the desired fine tuning.

3. Holding the mouse button down will cause the value to change rapidly.

On-Screen Display

More



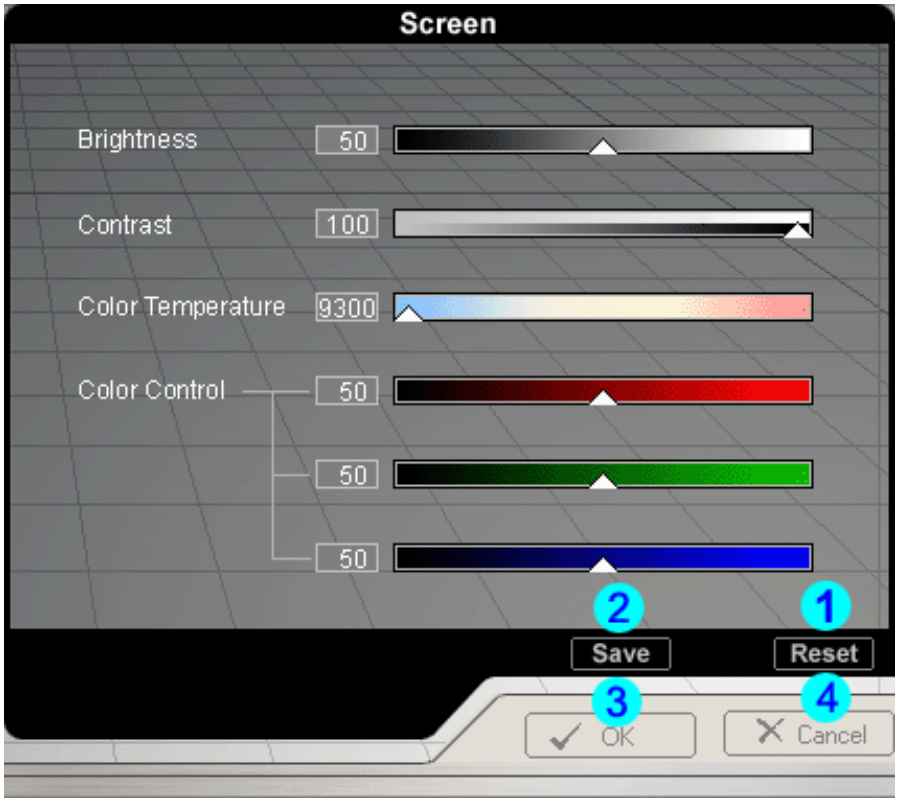
Degauss

This setting removes blurs on the screen, caused by interference from magnetic fields.

1. Selection and Adjustment : Place and click the mouse pointer on the Degauss icon that is located in the center of the screen. The picture image may become fuzzy for three to five seconds, with the monitor making a ticking sound when the icon is selected. Any fuzzy screen blotches are removed while the magnetic field affecting the screen is degaussed.

On-Screen Display

Others



1. Reset

This setting cancels adjustments made using the current tab. However, please note that a Reset function is not provided for the Highlight Zone tabs because their nature does not require being reset.

2. Save

This setting saves all the adjustments made in the current session since the program was started.

3. OK

This closes the monitor setting, saves the current adjustments and exits the program.

4. Cancel

This returns the monitor settings to their original state before the current adjustments are saved and exits the program.

Troubleshooting

Check List

Note

Before calling for service, check the information in this section to see if you can remedy any problems yourself. If you do need assistance, please call the phone number on the warranty card, the phone number on the Information section or contact your dealer.

Symptom	Check List	Solutions
No images on the screen. I cannot turn on the monitor.	Is the power cord connected properly?	Check the power cord connection and supply.
	Can you see "**No Connection**, **Check Signal Cable**" on the screen?	Check the signal cable connection.
	If the power is on, reboot the computer to see the initial screen(the login screen), which can be seen.	If the initial screen (the login screen) appears, boot the computer in the applicable mode (the safe mode for Windows 95/98/ME/XP/2000) and then change the frequency of the video card. (Refer to the Preset Display Modes) Note: If the initial screen (the login screen) does not appear, contact a service center or your dealer.
	Can you see "**Sync**. **Out of Range 68.7kHz 168Hz PP**" on the screen?	You can see this message when the signal from the video card exceeds the maximum resolution and frequency that the monitor can properly handle. Adjust the maximum resolution and frequency that the monitor can properly handle.
	There is no image on the screen. Is the power indicator on the monitor blinking at 1 second intervals?	The monitor is in PowerSaver mode. Press a key on the keyboard or move the mouse to activate the monitor and restore the image on the screen.
I cannot see the On Screen Display.	Have you locked the **On Screen Display (OSD)** Menu to prevent changes?	Unlock the OSD by pressing the MENU button for at least 10 seconds.

Troubleshooting

Check List

Symptom	Check List	Solutions
The image on the screen is shaking.	Check the monitor configuration to see if it is in Interlace Mode. (Interlace Mode: Vertical frequency 43Hz, 87Hz(i), etc)	The signal from the video card exceeds the maximum resolution and frequency of the monitor.
	Are there any magnetic products such as a power adapter, speaker or a high voltage wire near by?	Move the monitor away from anything that can create a strong magnetic field.
	Is the voltage stable?	The screen image can appear to shake or vibrate at a particular time of day due to low supply voltage.
	The screen image can also appear to shake or vibrate if there is a problem with the video card or the computer's main board.	
The screen shows strange colors or just black and white.	Is the screen displaying only one color as if looking at the screen through a cellophane paper?	Check the signal cable connection. Make sure the video card is fully inserted in it's slot.
	Have the screen colors become strange after running a program or due to a crash between applications?	Reboot the computer.
	Has the video card been set properly?	Set the video card by referring to the video card manual.
The screen suddenly has become unbalanced.	Have you changed the video card or the driver?	Adjust screen image position and size using the OSD.
	Have you adjusted the resolution or frequency to the monitor?	Adjust the resolution and frequency at the video card. (Refer to the Preset Display Modes).
	The screen can be unbalanced due to the cycle of the video card signals. Readjust Position by referring to the OSD.	
The screen is out of focus or OSD cannot be adjusted.	Have you adjusted the resolution or frequency on the monitor?	Adjust the resolution and frequency of the video card. (Refer to the Preset Display Modes).

Troubleshooting

Check List

Symptom	Check List	Solutions
The screen is partially distorted.	Are there any magnetic products such as an adapter, speaker or a high voltage wire near the monitor?	Enter the OSD and perform a "Degauss". Keep the monitor away from any magnetic products.
LED is blinking but no images on the screen.	Is the frequency properly adjusted when checking the Display Timing on the menu?	Adjust the frequency properly by referring to the video card manual and the Preset Display Modes. (The maximum frequency per resolution may differ from product to product.)
There are only 16 colors shown on the screen. The screen colors have changed after changing the video card.	Have the Windows colors been set properly?	For Windows 95/98/ME/XP/2000: Set the colors properly at the **Control Panel, Display, Settings.** For Windows 3.1: Adjust the colors of the screen using the **VGA utility** provided by the video card.
	Has the video card been set properly?	Set the video card by referring to the video card manual.
There is a message that reads "Unrecognized monitor, Plug & Play (VESA DDC) monitor found".	Have you installed the monitor driver?	Install the monitor driver according to the Driver Installation Instructions.
	See the video card manual to see if the Plug & Play (VESA DDC) function can be supported.	Install the monitor driver according to the Driver Installation Instructions.

Troubleshooting

Check List

Check the following items if there is trouble with the monitor.

1. Check if the power cord and the cable are properly connected to the computer.
2. Check if the computer beeps more than 3 times when booting.
   (If it does, request an after-service for the main board of the computer.)
3. If you installed a new video card or if you assembled the PC, check if the installed the adapter (video) driver and the monitor driver.
4. Check if the scanning ratio of the video screen is set at 75Hz or 85Hz.
   (Do not exceed 60Hz when using the maximum resolution.)
5. If you have problems in installing the adapter (video) driver, boot the computer in Safe Mode, remove the Display Adapter at the "**Control Panel, System, Device Administrator**" and then reboot the computer to reinstall the adapter (video) driver.

Tips for Highlight Zone

The Highlight feature is designed for movig image and so please use it in the moving image screen.

1. To protect CDT against the screen brightness, the Highlight Zone function persists for three hours and then automatically stops. So please reset it to continue.
2. Once the Highlight Zone has been switched off, you can't select any of the other menus within the Hightlight Zone.
3. When the Highlight Zone function is operated, the surrounding brightness of screen may become dark.
4. Depending on the video card you use, a color saturation phenomenon may occur in the Highlight Zone. In this case, slightly lower the contrast of the Highlight Zone and the color saturation will be reduced.

Note: If problems repeatedly occur, contact an authorized service center.

Troubleshooting

Q&A

1. General Q & A

Question	Answer
How can I change the frequency?	Frequency can be changed by reconfiguring the video card. Note that video card support can vary, depending on the version of the driver used. (Refer to the computer or the video card manual for details.)
How can I adjust the resolution?	Windows 95/98/ME/XP/2000: Set the resolution at the **Control Panel, Display**, **Settings**. Windows 3.1: Change the resolution and the colors using the VGA Utility provided by the video card. * Contact the video card manufacturer for details.
How can I set the Power Saving function?	Windows 95/98/ME/XP/2000: Set the function at BIOS-SETUP of the computer or the screen saver. (Refer to Windows/Computer Manual). Windows 3.1: Set the function using the VGA Utility provided by the video card.
The monitor makes a sound when it is turned on.	This is normal as some sound may be generated when the metal case and the electromagnet, which are installed to block any electromagnetic waves, interact with each other.
How can I clean the outer case/Picture tube?	Disconnect the power cord and then clean the monitor with a soft cloth, using either a cleaning solution or plain water. Do not leave any remains of the detergent nor scratch the case. Do not allow any water to go inside the monitor.

Troubleshooting

Q&A

2. MouScreen Q & A

Question	Answer
I cannot run the program.	Check to ensure the USB port of the monitor is connected to a root port or a hub USB port connected to the computer. If not connected properly, the MouScreen program will not run, displaying the following message: If you see the above message even when the monitor port is correctly connected to the computer, this means the operating system does not recognize the USB monitor. In this case, disconnect and then reconnect the USB port/cable before running the program. The operating system should now recognize the USB monitor.
The screen condition has changed drastically while being adjusted.	Make sure you close the MouScreen program before changing the vertical frequency or resolution. Do not run the MouScreen program together with OSD. Otherwise, the program may not work properly as data stored in the monitor may be different from those in the program. If you close and rerun the program, it will work properly because it reads the modified data while reloading.
The Highlight Zone does not appear even though I have turned the Highlight Zone on.	Check to see if the Contrast value of the Highlight Zone is 0 or if you changed the mode without closing the program. To protect the monitor life, the Highlight Zone automatically turns Off after three hours of constant use, and may not be reflected in the program. Check if three hours has elapsed since you turned it on. In this case, you would simply turn it on again, selecting the On checkbox.

Troubleshooting

Q&A

Question	Answer
The Highlight Zone's Size/Position Size Tabs do not respond.	Check if the Highlight Zone Full Screen function has been used but not yet released. If Full Screen is on, those three functions will not operate. Note: If this problem persists, reinstall the program. If it still persists, contact the Service Center.

Troubleshooting

Self-Test Feature Check

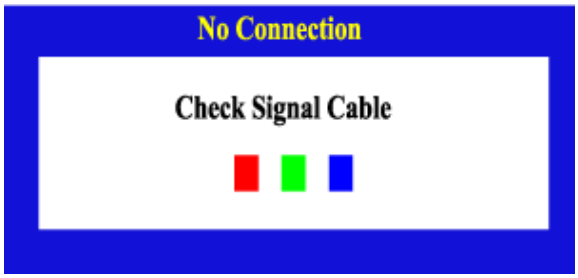
Your monitor provides a self test feature that allows you to check whether your monitor is functioning properly.

Self-Test Feature Check

1. Turn off both your computer and the monitor.
2. Unplug the video cable from the back of the computer.
3. Turn on the monitor.

.

If your monitor works normally, the following screen appears.



Failure of any of the boxes to appear indicates a problem with your monitor. This box also appears during normal operation if the video cable becomes disconnected or damaged.

4. Turn off your monitor and reconnect the video cable; then turn on both your computer and the monitor.

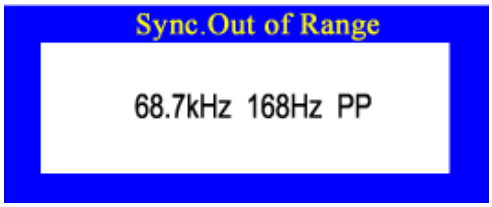
   If your monitor screen remains blank after using the previous procedure, check your video controller and computer system; your monitor is functioning properly.

Troubleshooting

Self-Test Feature Check

Werning Messages

If there is something wrong with the input signal, a message appears on the screen or the screen goes blank although the power indicator LED is still on. The message may indicate that the monitor is out of scan range or that you need to check the signal cable.



Environment

The location and the position of the monitor may influence the quality and other features of the monitor.

1. If there are any woofer speakers near the monitor, unplug and relocate the woofer to another room.
2. Remove all electronic devices such as radios, fans, clocks and telephones that are within 3 feet (one meter) of the monitor.
3. Degauss the monitor if any devices were removed from the area.

Useful Tips

- A monitor recreates visual signals received from the PC. Therefore, if there is trouble with the PC or the video card, this can cause the monitor to become blank, have poor coloring, noise, Sync. Out of Range, etc. In this case, first check the source of the problem, and then contact a service center or your dealer.

- **Judging the monitor's working condition**
  If there is no image on the screen or an "Sync. Out of Range" message comes up, disconnect the cable from the computer while the monitor is still powered on.
  - If there is a message coming up on the screen or if the screen goes white, this means the monitor is in working condition.
  - In this case, check the computer for trouble.

Specifications

General

General	
Model Name	SyncMaster 959NF
Picture Tube	
Type	19"(48cm) Natural Flat (45.8cm viewable)
Deflection angle	90°
Dot Pitch	0.24 mm (Uni-pitch Aperture Grill)
Screen type	Aluminized tri-color phosphor dot trio with black matrix. Anti-doming invar shadow mask. Multi-layer coated with anti-static
Maximum Flicker-Free Resolution	
1600x1200@87Hz Flicker-Free Display	
Active Display	
Horizontal	352 ± 3 mm
Vertical	264 ± 3 mm
Synchronization	
Horizontal	30 ~ 110 kHz
Vertical	50 ~ 160 Hz
Input Signal Definition	
Video Signal	RGB, Analog 0.7 Vpp positive at 75 ohms
Sync Signal	Separate H/V sync,Composite, TTL level, positive or negative Sync-On-Green(BNC option)
Display Color	
Unlimited	

Specifications

General

Maximum Pixel Clock
290 MHz

Power Supply
90 ~ 264VAC, 60/50 Hz ± 3Hz

Power Consumption
120W (Max), 110W (Nom)

Dimensions (WxDxH)
468x458x493mm (with Stand)

Weight
25.3 kg

Environmental considerations	
Operating	Temperature: 32°F ~ 104°F(0°C ~ 40°C) Humidity: 10% ~ 80%, non-condensing
Storage	Temperature: -4°F ~113°F (-20°C ~ 45°C) Humidity: 5% ~ 95%, non-condensing

Plug and Play Capability
This monitor can be installed on any Plug & Play compatible system. Interaction of the monitor and computer systems will provide the best operating conditions and monitor settings. In most cases, monitor installation will proceed automatically, unless the user wishes to select alternate settings.

Note: Design and specifications are subject to change without prior notice.

Specifications

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Maximum Pixel Clock
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Specifications

Preset Timing Modes

If the signal transferred from the computer is the same as the following Preset Timing Modes, the screen will be adjusted automatically. However, if the signal differs, the screen may go blank while the power LED is on. Refer to the video card manual and adjust the screen as follows.

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
IBM, 640 x 480	31.469	59.940	25.175	-/-
IBM, 720 x 400	31.469	70.087	28.322	-/+
VESA, 640 x 480	43.269	85.008	36.000	-/-
VESA, 800 x 600	53.674	85.061	56.250	+/+
VESA, 1024 x 768	68.677	84.997	94.500	+/+
VESA, 1280 x 1024	79.976	75.025	135.00	+/+
VESA, 1280 x 1024	91.146	85.024	157.50	+/+
VESA, 1600 x 1200	106.250	85.000	229.50	+/+

Horizontal Frequency
The time to scan one line connecting the right edge to the left edge of the screen horizontally is called Horizontal Cycle and the inverse number of the Horizontal Cycle is called Horizontal Frequency. Unit: kHz

Vertical Frequency
Like a fluorescent lamp, the screen has to repeat the same image many times per second to display an image to the user. The frequency of this repetition is called Vertical Frequency or Refresh Rate. Unit: Hz

Specifications

PowerSaver

This monitor has a built-in power management system called PowerSaver. This system saves energy by switching your monitor into a low-power mode when it has not been used for a certain amount of time. The monitor automatically returns to normal operation when you move the computer's mouse or press a key on the keyboard. For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods. The PowerSaver system operates with a VESA DPMS compliant video card installed in your computer. Use a software utility installed on your computer to set up this feature.

State	Normal Operation	Power-off Mode EPA/ENERGY 2000
Power Indicator	Green	Green, Blinking
Power Consumption	110W(Nominal) 120W(Maximum)	Less than 3W

This monitor is EPA ENERGY STAR®compliant and ENERGY2000 compliant when used with a computer equipped with VESA DPMS functionality.
As an ENERGY STAR®Partner, SAMSUNG has determined that this product meets the ENERGY STAR®guidelines for energy efficiency.

Information

Service

● **U.S.A.**
Samsung Computer Products Customer Service 400 Valley Road,
Suite 201, Mt. Arlington, NJ 07856
Tel. : (973)601-6000, 1-800-SAMSUNG (1-800-726-7864)
Fax. : (973)601-6001
http://samsungusa.com/monitor/

● **BRAZIL**
Samsung Eletronica da Amazonia Ltda.R. Prof. Manoelito de Ornellas, 303, Terro B
Chacara Sto. Antonio, CEP : 04719-040
Sao Paulo, SP SAC : 0800 124 421
http://www.samsung.com.br/

● **CANADA**
Samsung Electronics Canada Inc. 7037 Financial Drive Mississauga, Ontario L5N 6R3
Tel. : 1-800-SAMSUNG (1-800-726-7864)
Fax. : (905) 542-1199
http://www.samsung.ca

● **COLOMBIA**
Samsung Electronics Colombia
Cra 9 No 99A-02 Of. 106 Bogota, Colombia
Tel.: 9-800-112-112
Fax: (571) 618 – 2068
http://www.samsung-latin.com/
e-mail : soporte@samsung-latin.com

● **PANAMA**
Samsung Electronics Latinoamerica(Z.L.) S.A. Calle 50 Edificio Plaza Credicorp,
Planta Baja Panama
Tel. : (507) 210-1122, 210-1133
Tel : 800-3278(FAST)
http://www.samsung-latin.com/

● **PERU**
Servicio Integral Samsung Av.Argentina 1790 Lima1. Peru
Tel: 51-1-336-8686
Fax: 51-1-336-8551
http://www.samsungperu.com

● **GERMANY**
TELEPLAN Rhein-Main GmbH Feldstr. 16
64331 Weiterstadt
T. 06151/957-1306
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Information

Terms

- **Dot Pitch**
  The image on a monitor is composed of red, green and blue dots. The closer the dots, the higher the resolution. The distance between two dots of the same color is called the 'Dot Pitch'. Unit: mm
- **Vertical Frequency**
  The screen must be redrawn several times per second in order to create and display an image for the user. The frequency of this repetition per second is called Vertical Frequency or Refresh Rate. Unit: Hz
  Example: If the same light repeats itself 60 times per second, this is regarded as 60 Hz. In this case, flickering of the screen can be detected. To avoid this problem, there is a Flicker-free Mode using a vertical frequency over 70 Hz.
- **Horizontal Frequency**
  The time to scan one line connecting the right edge to the left edge of the screen horizontally is called Horizontal Cycle. The inverse number of the Horizontal Cycle is called Horizontal Frequency. Unit: kHz
- **Interlace and Non-Interlace Methods**
  Showing the horizontal lines of the screen from the top to the bottom in order is called the Non-Interlace method while showing odd lines and then even lines in turn is called the Interlace method. The Non-Interlace method is used for the majority of monitors to ensure a clear image. The Interlace method is the same as that used in TVs.
- **Plug & Play**
  This is a function that provides the best quality screen for the user by allowing the computer and the monitor to exchange information automatically. This monitor follows the international standard VESA DDC for the Plug & Play function.
- **Resolution**
  The number of horizontal and vertical dots used to compose the screen image is called 'resolution'. This number shows the accuracy of the display. High resolution is good for performing multiple tasks as more image information can be shown on the screen.
  Example: If the resolution is 1024 X 768, this means the screen is composed of 1024 horizontal dots (horizontal resolution) and 768 vertical lines (vertical resolution).
- **Highlight Zone**
  The Highlight Zone ensures clear images on TVs, video conferencing systems or photos by emphasizing a certain area on the screen.
- **MouScreen™ S/W**
  MouScreen is a software program that controls the condition of the monitor by using the USB communications. It uses a mouse to control all the functions. You can select items or sub functions by clicking the left button on the mouse.
- **USB(Universal Serial Bus)**
  USB is a connectivity specification for attaching peripherals to computers and is designed to meet Microsoft Plug and Play specification.

Information

Regulatory

- **FCC Information**

User Instructions
The Federal Communications Commission Radio Frequency Interference Statement includes the following warning:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television receptions, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

User Information
Changes or modifications not expressly approved by the party responsible for compliancecould void the user's authority to operate the equipment. If necessary, consult your dealeror an experienced radio/television technician for additional suggestions. You may find thebooklet called How to Identify and Resolve Radio/TV Interference Problems helpful. This booklet was prepared by the Federal Communications Commission. It is available from the U.S. Government Printing Office, Washington, DC 20402, Stock Number 004-000-00345-4

Warning
User must use shielded signal interface cables to maintain FCC compliance for the product.

Declaration of conformity for products Marked with FCC Logo
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
The party responsible for product compliance:
SAMSUNG ELECTRONICS CO., LTD
America QA Lab of Samsung
85 West Tasman Drive
San Jose, CA 95134 USA
Tel) 408-544-5124
Fax) 408-544-5191
Provided with this monitor is a detachable power supply cord with IEC320 style terminations. It may be suitable for connection to any UL Listed personal computer with similar configuration. Before making the connection, make sure the voltage rating of the computer convenience outlet is the same as the monitor and that the ampere rating of the computer convenience outlet is equal to or exceeds the monitor voltage rating. For 120 Volt applications, use only UL Listed detachable power cord with NEMA configuration 5-15P type (parallel blades) plug cap. For 240 Volt applications use only UL Listed Detachable power supply cord with NEMA configuration 6-15P type (tandem blades) plug cap.

Information

Regulatory

- **IC Compliance Notice**
  This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations of ICES-003.

  Cet appareil NumÈrique de classe Brespecte toutes les exigences du R?glemont ICES-003 sur les Èquipements produisant des interfÈrences au Canada.

- **MPR II Compliance**
  This monitor complies with SWEDAC(MPR II) recommendations for reduced electric and magnetic fields.

- **European Notice (Europe only)**
  Products with the CE Marking comply with both the EMC Directive (89/336/EEC), (92/31/EEC), (93/68/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Norms:
  - EN55022:1998 - Radio Frequency Interference
  - EN55024:1998 - Electromagnetic Immunity
  - EN61000-3-2:1995+A1+A2 - Power Line Harmonics
  - EN61000-3-3:1995 - Voltage Fluctuations
  - EN60950 - Product Safety.

- **PCT Notice**

Information

Regulatory

- **TCO'95-Ecological requirements for personal computers (TCO applied model only)**

AB general requirements

AB2 Written Eco-document acompanying the products
Congratulations! You have just purchased a TCO'95 approved and labelled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and to the further development of environmentally-adapted electronic products.

Why do we have environmentally-labelled monitors?

In many countries, environmental labelling has become an established method for encouraging the adaptation of goods and services to the environment.The main problem as far as monitors and other electronic equipment are concerned is that environmentally harmful substances are used both in the products and during their manufacture. Since it has not been possible so far for the majority of electronic equipment to be recycled in a satisfactory way, most of these potentially damaging substances sooner or later enter Nature.

There are also other characteristics of a monitor, such as energy consumption levels, that are important from both the working and natural environment viewpoints. Since all types of conventional electricity generation have a negative effect on the environment (acidic and climate-influencing emissions, radioactive waste, etc.) it is vital to conserve energy. Electronic equipment in offices consumes an enormous amount of energy, since it is often routinely left running continuously.

What does labelling involve?

This product meets the requirements for the TCO'95 scheme, which provides for international environmental labelling of monitors. The labelling scheme was developed as a joint effort by the TCO (The Swedish Confederation of Professional Employees), Naturskyddsforeningen (The Swedish Society for Nature Conservation) and NUTEK (The National Board for Industrial and Technical Development in Sweden).

The requirements cover a wide range of issues: environment, ergonomics, usability, emission of electrical and magnetic fields, energy consumption and electrical and fire safety.

The environmental demands concern among other things restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs (freons), and chlorinated solvents. The product must be prepared for recycling and the manufacturer is obliged to have an environmental plan, which must be adhered to in each country where the company conducts its operations policy. The energy requirements include a demand that the monitor after a certain period of inactivity shall reduce its power consumption to a lower level, in one or more stages. The length of time to reactivate the monitor shall be reasonable for the user. Labelled products must meet strict environmental demands, for example in respect of the reduction of electric and magnetic fields, along with physical and visual ergonomics and good usability.

Information

Regulatory

TCO Development Unit 1996-11-29
On the page this folder you will find a brief summary of the environmental requirements met by this product.
The complere environmental criteria document may be ordered from:
TCO Development Unit
S-11494 Stockholm
Sweden
Fax: +46 8 782 92 07
E-mail (Internet): development@tco.se
Current information regarding TCO'95-approved and labelled products may also be obtained via the Internet, using the address:
http://www.tco-info.com/
TCO'95 is a co-operative project between(3 logos)

Environmental Requirements
Brominated flame retardants are present in printed circuit boards, cables, wires, casings and housings. In turn, they delay the spread of fire. Up to thirty percent of the plastic in a computer casing can consist of flame retardant substances. These are related to another group of environmental toxins, PCBs, which are suspected to give rise to similar harm, including reproductive damage in fish eating birds and mammals, due to the bioaccumulative processes. Flame retardants have been found in human blood and researchers fear that disturbances in foetus development may occur. TCO'95 demand requires that plastic components weighing more than 25 grams must not contain organically bound chlorine and bromine.

Lead
Lead can be found in picture tubes, display screens, solders and capacitors. Lead damages the nervous system and in higher doses, causes lead poisoning. TCO'95 requirement Permits the inclusion of lead since no replacement has yet been developed.

Cadmium
Cadmium is present in rechargeable batteries and in the colour generating layers of certain computer displays. Cadmium damages the nervous system and is toxic in high doses. TCO'95 requirement states that batteries may not contain more than 25 ppm (parts per million) of cadmium. The colour-generating layers of display screens must not contain any cadmium.

Mercury
Mercury is sometimes found in batteries, relays and switches. Mercury damages the nervous system and is toxic in high doses. TCO'95 requirement states that batteries may not contain more than 25 ppm (parts per million) of mercury. It also demands that no mercury is present in any of the electrical or electronics components concerned with the display unit.

CFCs (freons)
CFCs (freons) are sometimes used for washing printed circuit boards and in the manufacturing of expanded foam for packaging. CFCs break down ozone and thereby damage the ozone layer in the stratosphere, causing increased reception on Earth of ultraviolet light with consequent increased risks of skin cancer (malignant melanoma).

- The relevant TCO'95 requirement: Neither CFCs nor HCFCs may be used during the manufacturing of the product or its packaging.

Information

Regulatory

- **TCO'99-Ecological requirements for personal computers (TCO applied model only)**

Congratulations!
You have just purchased a TCO'99 approved and labelled product! Your choice has provided you with a product developed for professional use. Your purchase has also contributed to reducing the burden on the environment and also to the further development of environmentally adapted electronics products.

This product meets the requirements for the TCO'99 scheme which provides for an international environmental and quality labelling labelling of personal computers. The labelling scheme was developed as a joint effort by the TCO(The Swedish Confederation of Professional Employees), Svenska Naturskyddsforeningen(The Swedish Society for Nature Conservation), Statens Energimyndighet(The Swedish National Energy Administration) and SEMKO AB.

The requirements cover a wide range of issuse: environment, ergonomics, usability, reduction of electric and magnetic fields, energy consumption and electrical safety.

Why do we have environmentally labelled computers?
In many countries, environmental labelling has become an established method for encouraging the adaptation of goods and services to the environment. The main problem, as far as computers and other electronics equipment are concerned, is that environmentally harmful substances are used both in the products and during their manufacture. Since it is not so far possible to satisfactorily recycle the majority of electronics equipment, most of these potentially damaging substances sooner or later enter nature.

There are also other characteristics of a computer, such as energy consumption levels, that are important from the viewpoints of both the work (internal) and natural (external) environments. Since all methods of electricity generation have a negative effect on the environment (e.g. acidic and climate-influencing emissions, radioactive waste), it is vital to save energy. Electronics equipment in offices is often left running continuously and thereby consumes a lot of energy.

What does labelling involve?
The environmental demands has been developed by Svenska Naturskyddsforeningen (The Swedish Society for Nature Conservation). These demands impose restrictions on the presence and use of heavy metals, brominated and chlorinated flame retardants, CFCs(freons)and chlorinated solvents, among other things. The product must be prepared for recycling and the manufacturer is obliged to have an environmental policy which must be adhered to in each country where the company implements its operational policy.

The energy requirements include a demand that the computer and/or display, after a certain period of inactivity, shall reduce its power consumption to a lower level in one or more stages. The length of time to reactivate the computer shall be reasonable for the user.

Below you will find a brief summary of the environmental requirements met by this product. The complete environmental criteria document may be ordered from:

Information

Regulatory

TCO Development
SE-114 94 Stockholm, Sweden
Fax: +46 8 782 92 07
Email (Internet): development@tco.se

Current information regarding TCO'99 approved and labelled products may also be obtained via the Internet, using the address: http://www.tco-info.com/

Environmental requirements
Flame retardants
Flame retardants are present in printed circuit boards, cables, wires, casings and housings. Their purpose is to prevent, or at least to delay the spread of fire. Up to 30% of the plastic in a computer casing can consist of flame retardant substances. Most flame retardants contain bromine or chloride, and those flame retardants are chemically related to another group of environmental toxins, PCBs. Both the flame retardants containing bromine or chloride and the PCBs are suspected of giving rise to severe health effects, including reproductive damage in fish-eating birds and mammals, due to the bio-accumulative* processes. Flame retardants have been found in human blood and researchers fear that disturbances in foetus development may occur.

The relevant TCO'99 demand requires that plastic components weighing more than 25 grams must not contain flame retardants with organically bound bromine or chlorine. Flame retardants are allowed in the printed circuit boards since no substitutes are available.

Cadmium**
Cadmium is present in rechargeable batteries and in the colour-generating layers of certain computer displays. Cadmium damages the nervous system and is toxic in high doses. The relevant TCO'99 requirement states that batteries, the colour-generating layers of display screens and the electrical or electronics components must not contain any cadmium.

Mercury**
Mercury is sometimes found in batteries, relays and switches. It damages the nervous system and is toxic in high doses. The relevant TCO'99 requirement states that batteries may not contain any mercury. It also demands that mercury is not present in any of the electrical or electronics components associated with the labelled unit. There is however one exception. Mercury is, for the time being, permitted in the back light system of flat panel monitors as today there is no commercially available alternative. TCO aims on removing this exception when a Mercury free alternative is available.

CFCs (freons)
The relevant TCO'99 requirement states that neither CFCs nor HCFCs may be used during the manufacture and assembly of the product. CFCs (freons) are sometimes used for washing printed circuit boards. CFCs break down ozone and thereby damage the ozone layer in the stratosphere, causing increased reception on earth of ultraviolet light with e.g. increased risks of skin cancer (malignant melanoma) as a consequence.

Lead**
Lead can be found in picture tubes, display screens, solders and capacitors. Lead damages the nervous system and in higher doses, causes lead poisoning. The relevant TCO'99 requirement permits the inclusion of lead since no replacement has yet been developed.

* Bio-accumulative is defined as substances which accumulate within living organisms.
** Lead, Cadmium and Mercury are heavy metals which are Bio-accumulative.

Information

Natural Color

- **Natural Color Software Program**

One of the recent problems in using a computer is that the color of the images printed out by a printer or other images scanned by a scanner or a digital camera are not the same as those shown on the monitor.
The Natural Color S/W is the very solution for this problem. It is a color administration system developed by Samsung Electronics in association with Korea Electronics & Telecommunications Research Institute (ETRI). This system is available only for Samsung monitors and makes the color of the images on the monitor the same as the printed or scanned images.
For more information, refer to Help (F1) in the software program.

How to install the Natural Color software
Insert the CD included with the Samsung monitor into the CD-ROM Drive. Then, the initial screen of the program installation will be executed. Click Natural Color on the initial screen to install the Natural Color software. To install the program manually, insert the CD included with the Samsung monitor into the CD-ROM Drive, click the [Start] button of Windows and then select [Execute].
Enter D:\color\eng\setup.exe and then press the key.
(If the drive where the CD is inserted is not D:\, enter the applicable drive.)

How to delete the Natural Color software program
Select [Setting]/[Control Panel] on the [Start] menu and then double-click [Add/Delete a program].
Select Natural Color from the list and then click the [Add/Delete] button.

Information

MouScreen™

MouScreen™ S/W

MouScreen Program requires built-in USB for use with SyncMaster Products.
(Note: SyncMaster 1200NF does not support MouScreen.)

MouScreen is a software program that controls your monitor settings using the USB (Universal Serial Bus) interface.
All monitor settings, adjustments and controls can be managed by the use of the mouse alone. You may select menus or sub-functions by simply clicking the left mouse button and then making the adjustment by dragging the selected icons.

Installation Requirements
As MouScreen uses a USB connection with your host system, MouScreen can be installed only on systems with a Samsung monitor that is equipped with a USB port.

Before Running MouScreen V2
First, check to ensure the USB port of the monitor is connected to your computer by a root or hub USB port.
If not connected properly, the MouScreen program will not run, displaying the following message:

If the above message is displayed, and the monitor is properly connected to the computer, this means that the operating system has not recognized the USB monitor. Disconnect and then reconnect the USB connection, and run the program again.

Uninstalling MouScreen V2 from Your Computer
To uninstall MouScreen 2.0 from your system, follow either one of these procedures:

Click **Start**, **Programs**, **MouScreen 2.0**, **Uninstall MouScreen 2.0** on your Windows' desktop or click **Settings**, **Control Panel**, **Program Add/Remove** and then click **Add/Remove** after selecting **MouScreen 2.0** in the Program list.

Information

MouScreen™

Matters to note when changing modes
Make sure your MouScreen program is closed before changing the vertical frequency or resolution.

Otherwise, the program may not work properly as data stored in the monitor may be different from those in the program.

If you close and rerun the program, it will work properly because it reads the modified data.

Conflict with OSD
In principle, the OSD (on-screen display) does not work when this program runs on the system. As the program shares internal data with the OSD, it will not work properly. Close the MouScreen program before running the OSD.

Information

Authority

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